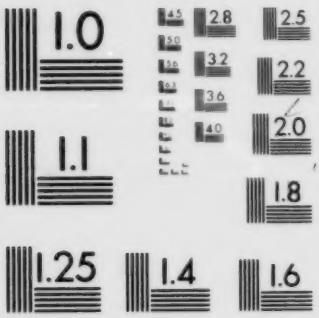
MS109

Micromedia Limited

The contents of this microfiche are copyright by the publisher of the original document. Please contact the original publisher for guidance in copyright matters.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

This statement was filmed with this document. If the pages of the document are less clear than this statement it is due to the poor photographic quality of the document.

NATIONAL MICROGRAPHICS ASSOCIATION

24x

Open File Report 87-18

LITHOGEOCHEMISTRY AND METALLIC MINERAL POTENTIAL OF VOLCANIC ROCKS ALONG THE JACQUET RIVER FAULT (PARTS OF N.T.S. 21 O/16, 21 O/9, AND 21 O/10) NORTHEASTERN NEW BRUNSWICK

by

Donald M. Burton

Canada-New Brunswick Mineral Development Agreement

Entente Canada-Nouveau-Brunswick L'Exploitation Minérale

Natural Resources and Energy New Brunswick

Ressources Naturelles et Énergie Nouveau-Brunswick

Energy, Mines and Resources Canada

Énergie, Mines et Ressources Canada

88-01204/

This report has been prepared by:

Minerals and Energy Division
Department of Natural Resources and Energy
New Brunswick

Hon. Morris Green, Minister

1987

LITHOGEOCHEMISTRY AND METALLIC MINERAL POTENTIAL OF VOLCANIC ROCKS ALONG THE JACQUET RIVER FAULT (PARTS OF N.T.S. 21 O/16, 21 O/9 AND 21 O/10) NORTHEASTERN NEW BRUNSWICK

This project was funded under the Canada-New Brunswick Mineral Development Agreement, a subsidiary agreement under the Economic and Regional Development Agreement.

Copies available by contacting:

Minerals and Energy Division
Department of Natural Resources and Energy
P.O. Box 6000, Fredericton
New Brunswick E3B 5H1

1987

Report No.: Open File Report 87-18

Author: Donald M. Burton

Catalogue No.: ISSN 0712-4562

This report should be referenced in the following manner:

BURTON, D.M. 1987. Lithogeochemistry and metallic mineral potential of volcanic rocks along the Jacquet River Fault (parts of N.T.S. 21 O/16, 21 O/9 and 21 O/10), northeastern New Brunswick. New Brunswick Department of Natural Resources and Energy, Minerals and Energy Division, Open File Report 87-18, 91 p.

TABLE OF CONTENTS

		Page
List of Tables		ii
List of Figures		ii
List of Plates		ii
SUMMARY		iii
ACKNOWLEDGEMENTS		iv
INTRODUCTION		1
Sample Collection and Analytical Methods		1
Data Presentation		6
DISCUSSION OF MINERALIZED AREAS		8
REFERENCES		25
APPENDIX A	Geochemical Data - All Outcrop Samples (numerically)	27
APPENDIX B	Geochemical Data-All Drill Core Samples	47
APPENDIX C	Geochemical Data-Mineralized Outcrop Samples	55
APPENDIX D	Geochemical Data - All Samples with Detectable Gold	65
APPENDIX E	Notes on Analytical Precision	79

Page

List of Tables

TABLE 1	Analytical Methods and Detection Limits	5
TABLE 2	Elemental Abundance, Range and Mean Values Felsic Volcanic Rocks	9
TABLE 3	Elemental Abundance, Range and Mean Values Mafic Volcanic Rocks	10
Table 4	Summary of Stream Sediment Geochemistry from Jacquet River Tributaries - G.S.C. Survey	11

List of Figures

Figure 1	Location Map Showing Outline of N.T.S. Map Sheets Accompanying This Report	2
Figure 2	Generalized Geology along the Jacquet River Fault (after Davies 1979)	3
Figure 3	Sketch Map Showing Locations of Samples 733, 734A and 734B	7

List of Plates (in back pocket)

PLATE 87-61A	Geological Compilation Showing Rock Sample Locations Jacquet River Project - N.T.S. 21 O/16a,b (Scale 1:20,000)
PLATE 87-61B	Geological Compilation Showing Rock Sample Locations Jacquet River Project - N.T.S. 21 O/9g (Scale 1:20,000)
PLATE 87-61C	Geological Compilation Showing Rock Sample Locations Jacquet River Project - N.T.S. 21 O/9e,f (Scale 1:20,000)
PLATE 87-61D	Geological Compilation Showing Rock Sample Locations Jacquet River Project - N.T.S. 21 O/10g,h (Scale 1:20,000)
PLATE 87-61E	Geological Compilation Showing Rock Sample Locations Jacquet River Project - N.T.S. 21 O/10a,b (Scale 1:20,000)

SUMMARY

An assessment of the metallic mineral potential of a belt of Early Devonian (Dalhousie Group) volcanic rocks was undertaken in conjunction with geological investigations along the Jacquet River Fault in northeastern New Brunswick (parts of N.T.S. 21 O/16, 21 O/9 and 21 O/10). This report summarizes lithogeochemical data obtained from 508 outcrop and diamond drill core samples. Determinations for twenty-five elements were made, including Cu, Pb, Zn, Au, Ag, As, Sb, Hg, Bi, and Mo.

No new mineral occurrences of economic grade were encountered. However, certain areas are considered worthy of further investigation on the basis of encouraging trace-element associations. Recent gold discoveries in the Upsalquitch Forks area (N.T.S. 21 O/10) and at Rocky Brook (N.T.S. 21 O/9) are known to be associated with Hg-Sb-Ag-As-(Bi). A number of samples were collected from felsic volcanic rocks in the northern part of the belt, along tributaries of the Jacquet River known to be highly anomalous in their silt geochemistry. This area shows distinctive enrichments in some trace elements, particularly in Hg and Sb, that may represent alteration haloes associated with blind mineral deposits.

ACKNOWLEDGEMENTS

This project was carried out under the supervision of the author and G. R. Philpott. Funding was provided through the Canada-New Brunswick Mineral Development Agreement. Geologic mapping and sample collection was conducted by K. Andersson, J. Creamer and B. O'Connor with the assistance of L. Arseneau, D. Baird and D. Hogg. Final map and data presentation was facilitated by J. Creamer, A. LeBlanc and L. McCavour. The manuscript was critically reviewed by J.L. Davies, L.R. Fyffe and S.R. McCutcheon.

The author has benefited greatly from numerous property examinations with company geologists of Lacana Mining Corporation and Noranda Exploration Company Limited.

Special thanks are extended to the staff of the Bonaventure Lodge for their hospitality. Logistical support was provided through the staff of the Geological Surveys Branch, Bathurst and, in particular, the author is grateful for the assistance of S. McKinnon in assisting the author through the maze of forms (in triplicate) required to bring this project to a successful completion.

INTRODUCTION

This report summarizes lithogeochemical data obtained from 508 rock and diamond drill core samples of Devonian and Silurian volcanic rocks that crop out along the Jacquet River Fault in northeastern New Brunswick (parts of N.T.S. map sheets 21 Ø/9, 21 Ø/10 and 21 Ø/16; Figure 1). The purpose of this program was to assess the metallic mineral potential of a belt of Early Devonian (Dalhousie Group) volcanic rocks known to be geochemically anomalous as shown by stream sediment surveys (Figure 2) conducted by the Geological Survey of Canada in 1965 (Boyle *et al.* 1966). At that time attention was focused on base metal potential, but, recent discoveries of gold-bearing alteration zones along major faults in the Upsalquitch Forks area (N.T.S. 21 Ø/10), have prompted a re-examination of the precious metal potential of large parts of northern New Brunswick. Exploration for gold in the Alcida-Nicholas Denys area (N.T.S. 21 P/12 and 21 P/13) is undergoing a resurgence in light of the recent discovery of gold by Lacana Mining Corporation near Alcida, 25 km northwest of Bathurst.

Sample Collection and Analytical Methods

Samples were collected for three principal data sets:

1. known mineral occurrences

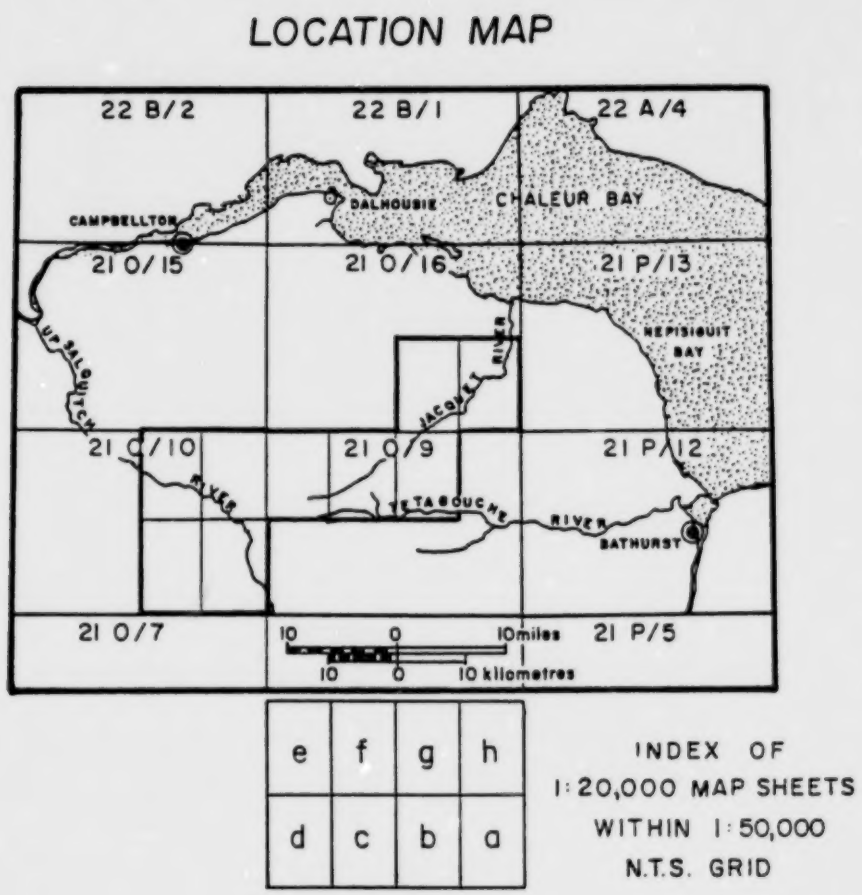


Figure 1. Location map showing outline of N.T.S. map sheets accompanying this report.

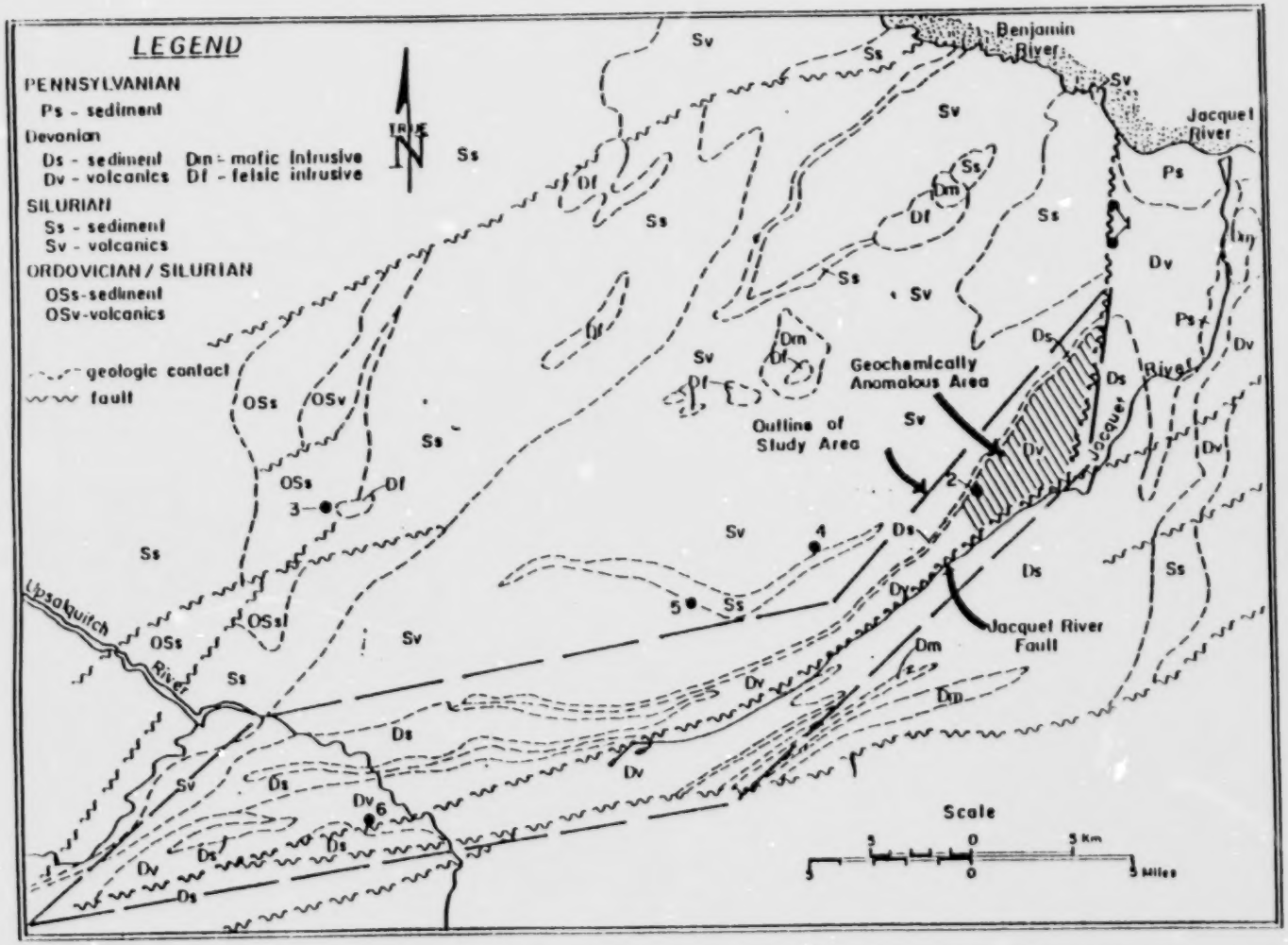


Figure 2. Generalized Geology along the Jacquet River Fault (after Davies 1979)

Mineral Occurrences: 1. Nash Creek, 2. McNeill Bk., 3. Popelogan, 4. Upper McNair Bk., 5. Rocky Bk., 6. 9 Mile Bk.

2. mineralized and/or altered rock types
3. whole rock lithogeochemical studies.

All analytical data are presented for the first two sets, whereas the whole rock data are summarized to provide meaningful elemental background concentrations for comparative purposes.

Sample collection was concentrated in the area of anomalous silt geochemistry (Plates 87-61A and 87-61C, Figure 2). Although no elaborate procedure was undertaken to prepare mineralized samples for analysis (the rocks were simply slabbed and scrubbed), care was taken to submit as "fresh" a sample as possible for whole rock studies (weathered surfaces amd veins were removed and sawn surfaces were ground to remove saw blade contamination). Representative hand specimens and excess crushed material of all samples submitted for analysis are stored at the Bathurst Regional Office for reference.

All samples (with the exception of 16 samples from diamond drill hole MD-2) were analyzed for copper, lead, zinc, gold, silver, arsenic, antimony, mercury, bismuth, molybdenum, selenium, tellurium, nickel, cobalt, cadmium, chromium, titanium, vanadium, manganese, phosphorous, iron, sodium, potassium, calcium and magnesium. Analytical work was performed by X-Ray Assay Laboratories of Toronto, Ontario. A listing of element detection limits and analytical methods is presented in Table 1.

TABLE 1 ANALYTICAL METHODS AND DETECTION LIMITS

ELEMENT	METHOD	DETECTION LIMIT
Cu (copper)	DCP	0.5 ppm
Pb (lead)	DCP	2 ppm
Zn (zinc)	DCP	0.5 ppm
Au (gold)	FA/INAA	1 ppb
Ag (silver)	DCP	0.5 ppm
As (arsenic)	NA	1 ppm
Sb (antimony)	NA	0.2 ppm
Hg (mercury)	WET	1 ppb
Bi (bismuth)	ICPMS	0.1 ppm
Mo (molybdenum)	DCP	1 ppm
Se (selenium)	ICPMS	5 ppm
Te (tellurium)	ICPMS	1 ppm
Ni (nickel)	DCP	1 ppm
Co (cobalt)	DCP	1 ppm
Cd (cadmium)	DCP	1 ppm
Cr (chromium)	DCP	2 ppm
Ti (titanium)	DCP	10 ppm
V (vanadium)	DCP	2 ppm
Mn (manganese)	DCP	2 ppm
P (phosphorous)	DCP	10 ppm
Fe (iron)	DCP	2 ppm
Na (sodium)	DCP	100 ppm
K (potassium)	DCP	100 ppm
Ca (calcium)	DCP	100 ppm
Mg (magnesium)	DCP	100 ppm

DCP = double couple plasma
FA/INAA = lead fire assay/neutron activation (20 gm)
ICPMS = inductively coupled plasma mass spectrometer
NA = neutron activation
WET = specific geochemical method

All analytical work performed by X-Ray Assay Laboratories of Toronto, Ontario

Data Presentation

All outcrop data are tabulated in Appendix A in numerical order giving the approximate location by geographic name and the N.T.S. map number on which the samples are plotted. Diamond drill core analyses are presented in Appendix B by hole number with sampled intervals. Appendix C provides a listing of analyses from mineral occurrences and from samples significantly mineralized in base and/or pathfinder elements. Appendix D lists all samples containing detectable gold (>1 ppb).

The accompanying map plates are geological compilations of the New Brunswick 1/4 mile map series presented at a scale of 1:20,000, showing the location of sample sites and mineral occurrences. The base maps were derived from enlargements of 1:50,000 topographic maps with the contours and U.T.M grid removed to reduce clutter. The geologic mapping presented on these plates was carried out during the period 1971-1974. No attempt has been made to re-interpret these geologic maps. For the purpose of this report, the maps give a reasonable indication of the lithologies sampled and age relationships. For more detailed information on outcrop locations, structural measurements and lithologic descriptions, the reader is referred to the appropriate 1/4 mile map plates. The 1/4 mile mapping boundaries are indicated on each map. Three samples (733, 734A and 734B) plot just west of N.T.S. 21 O/10b. There is no accompanying plate for this map area and the locations of these samples are shown in Figure 3.

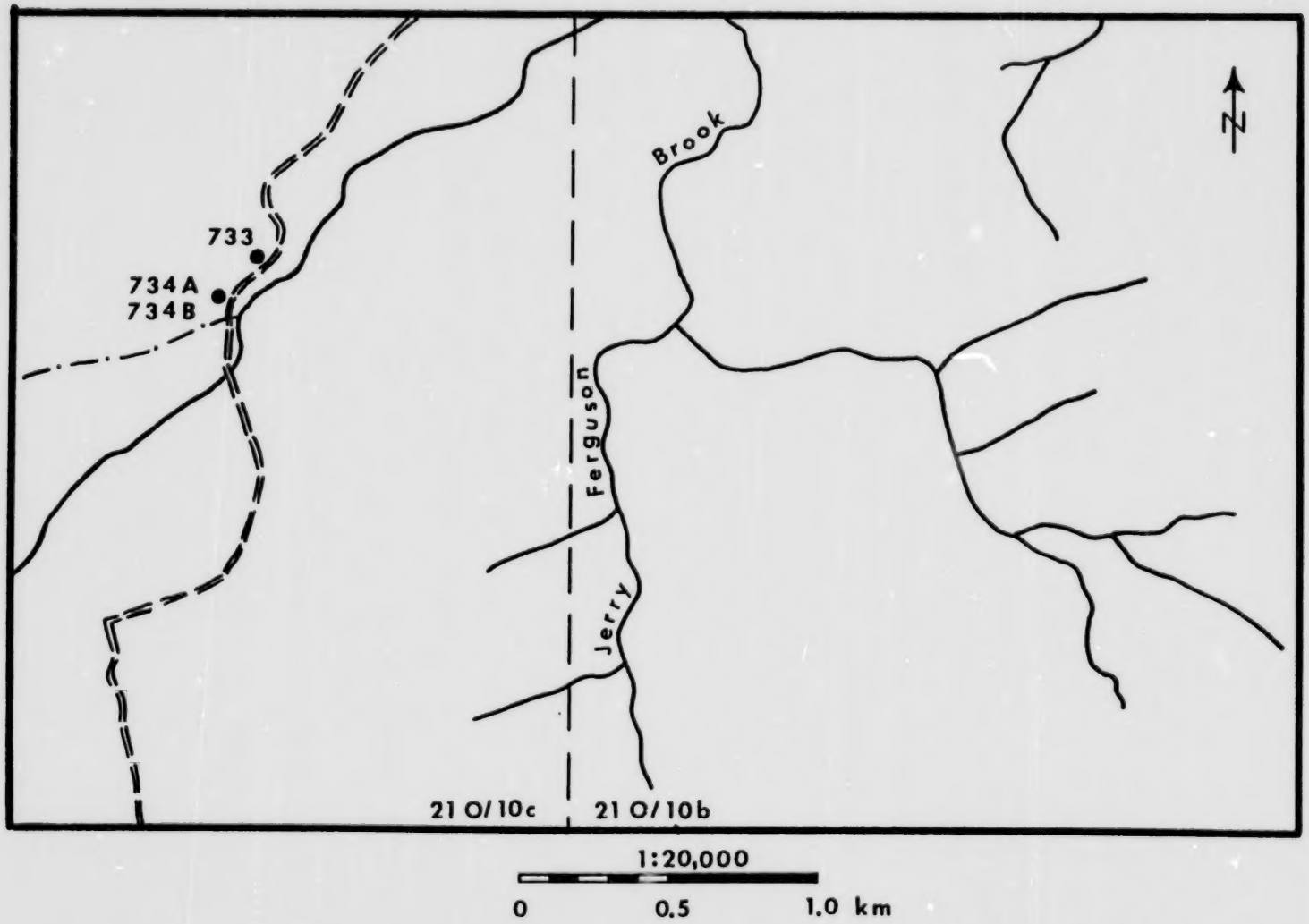


Figure 3. Sketch map showing locations of samples 733,734A and 734B

The data summarized in Tables 2 and 3 pertains to elemental abundance, range and mean values for felsic and mafic volcanic rocks. The average concentrations of the relevant elements in "typical" granites and basalts listed in reference sources are compared to arithmetic averages obtained from whole rock sample suites collected from the study area. The background values for the area give an indication of the extent of elemental enrichment or depletion in the rocks.

Table 4 summarizes stream sediment geochemistry based on the G.S.C. survey (Boyle *et al* 1966).

NOTE: Several tributaries are mislabelled on the maps that accompany Boyle *et al.*'s text. Reference to tributaries in this report follow stream names as shown on the 1:50,000 N.T.S. map sheet (21 O/16). The G.S.C. report mistakenly labels McLean Brook as Little Ramsay Brook, Little Ramsay Brook as Big Ramsay Brook and Big Ramsay Brook as McLean Gulch Brook.

DISCUSSION OF MINERALIZED AREAS

Due to the large volume of data that accompanies this report, the following section summarizes geochemical results from both mineral occurrences (Cu, Pb, Zn, Au and Ag) and areas enriched in pathfinder elements (As, Sb, Hg, Bi and Mo). These areas will be discussed in geographical order by map sheet from northeast to southwest. Numbers in brackets beside each heading refer to rock sample numbers. Analytical data on

TABLE 2

Elemental Abundance, Range and Mean Values[1]
Felsic Volcanic Rocks

Element	Granite[2]	Felsic Volcanic Rocks, This Study		
		(background)[3]	(range)	(average)[4]
Cu	10	6	1 - 420	27
Pb	20	16	0 - 2800	57
Zn	40	82	11 - 9200	219
Au	0.004	0.001	0 - 0.14	0.002
Ag	0.04	0	0 - 30	0.7
As	1.5	12	1 - 390	33
Sb	0.2	2.2	0.4 - 100	3.8
Hg	0.08	0.03	0 - 5.01	0.09
Bi	0.1	0.1	0 - 32	0.5
Mo	2	3	0 - 32	6
Se	0.05	2	0 - 18	3
Te	0.001	0	0 - 6.7	0
Ni	0.5	4	0 - 91	11
Co	11	7	2 - 81	20
Cd	0.2	0	0 - 41	1
Cr	4	2	0 - 230	16
Ti(%)	0.23	0.23	0.006 - 1.90	0.49
V	20	25	0 - 520	77
Mn	500	459	26 - 19000	1317
P	700	350	40 - 2800	629
Fe(%)	2.70	2.98	0.66 - 9.90	4.11
Na(%)	2.80	2.19	0.004 - 5.20	1.23
K (%)	3.30	3.96	0.002 - 10.00	4.31
Ca(%)	1.60	0.58	0.01 - 16.00	1.52
Mg(%)	0.16	0.43	0.004 - 4.90	0.66

1) all data reported in ppm unless indicated otherwise
2) average elemental abundances of "average granite" taken from Krauskopf (1967)
3) average of 33 samples collected for whole rock lithogeochemical studies
4) does not include samples taken from mineral occurrences

TABLE 3

Elemental Abundance, Range and Mean Values[1]
Mafic Volcanic Rocks

Element	Basalt[2]	Mafic Volcanic Rocks, This Study		
		(background)[3]	(range)	(average)[4]
Cu	100	32	0 - 6400	91
Pb	5	9	0 - 25000	26
Zn	100	153	56 - 35000	217
Au	0.004	0.001	0 - 0.039	0.002
Ag	0.1	0	0 - 1500	0.2
As	2	21	1 - 580	30
Sb	0.2	0.8	0 - 14.0	1.3
Hg	0.08	0.02	0 - 7.49	0.043
Bi	0.15	0.1	0 - 12.9	1.4
Mo	1	3	0 - 100	7
Se	0.05	3	0 - 33	4
Te	0.001	0	0 - 5	0
Ni	150	47	2 - 130	39
Co	50	42	5 - 92	22
Cd	0.2	0	0 - 130	0
Cr	200	83	0 - 290	66
Ti(%)	0.90	1.04	0.22 - 2.70	1.00
V	250	209	12 - 480	191
Mn	2200	1361	560 - 14000	1797
P	1400	1332	110 - 4400	1177
Fe(%)	8.60	7.06	3.40 - 16.00	7.05
Na(%)	1.90	2.78	0.15 - 5.00	2.38
K (%)	0.83	1.43	0.04 - 6.60	1.74
Ca(%)	6.70	3.91	0.07 - 18.00	4.19
Mg(%)	4.50	2.79	0.49 - 4.60	2.14

1) all data reported in ppm unless indicated otherwise
2) average elemental abundances of "average basalt" taken from Krauskopf (1967)
3) average of 38 samples collected for whole rock lithogeochemical studies
4) does not include samples taken from mineral occurrences

TABLE 4

Summary of Stream Sediment Geochemistry from Jacquet River Tributaries

G.S.C. Survey (Boyle et al. 1966)

Brook	No. of Samples	Cu	Pb	Zn	Ag	As	Sb	Mo	Mn
Big Hole	34	4 - 36	5 - 95	50 - 380	n.d.	2-12	1-3	1-4	700-7000
Big Hole S. Trib.	2	16 - 24	75	260 - 290	n.d.	24-26	1	1-2	2000-3000
McLean	11	4 - 24	5 - 40	150 - 700	n.d.	2-12	3-6	1	1500-7000
Little Ramsay	21	4 - 52	10 - 200	170 - 800	n.d.	2-10	1-6	1-5	700-5000
Big Ramsay	14	20 - 44	5 - 120	200 - 950	n.d.	2-22	3-8	1-3	1000-5000
Big Ramsay N. Tribs.	2	28 - 48	25 - 45	500 - 800	n.d.	n.d.- 2	3	1-2	1500-2000
Lead Gulch	1	80	120	1400	n.d.	22	4	1	700
Little McLean	5	16 - 20	30 - 45	200 - 1000	n.d.	8-24	3-6	1-1	2000
Falls Gulch	14	4 - 92	10 - 2300	750 - 3800	0.7	2-44	2-12	1-11	2000-10000
Falls Gulch N. Trib.	2	36 - 40	1000 - 1200	6800 - 8000	5-7	24-28	6-14	2-4	7000-10000
Wildcat	9	4 - 16	5 - 80	40 - 1000	n.d.	2-6	1-3	1-8	500-3000
Hayes Gulch	6	4 - 110	10 - 1100	160 - 2800	0-1	2-30	2-6	2-4	700-10000
Hayes S. Trib.	2	36 - 44	95 - 120	700 - 1400	2-5	22-28	3	1	300-5000
McNeill	8	4 - 40	10 - 250	120 - 1400	n.d.	2-16	3-6	1-3	2000-5000
McNeill N. Trib.	1	68	120	1400	n.d.	n.d.	4	2	1500
McNeill S. Trib.	1	72	250	2800	n.d.	4	6	2	5000
Lower McNair	17	4 - 68	10 - 35	90 - 270	n.d.	2-23	2-6	1-2	1000-2000
Upper McNair	5	12 - 24	65 - 75	260 - 360	n.d.	12-50	3	1-4	1000-1500
U. McNair N. Trib.	2	20 - 28	70	700 - 1000	n.d.	50-70	3	1-2	1500
Four Mile	1	24	50	150	n.d.	8	3	2	1500

n.d. = not detected

All data in ppm

these samples can be found most readily by referring to Appendix C (Geochemical Data - Mineralized Outcrop Samples). Plate numbers refer to the accompanying maps on which the samples are plotted.

a) **Big Hole Brook Vein Breccias** (101, 102, 106, 131, 193; Plate 87-61A)

This mineral occurrence (No. 48, Map NR-3) comprises a number of narrow (<0.5 m) quartz-ankerite vein-breccias that inject sedimentary and mafic volcanic rocks of both Silurian and Devonian age along 600 m of Big Hole Brook. Dr. W. J. Wright of the Department of Lands and Mines located nine of these occurrences in 1938 and obtained up to 10.9% Pb and 8.1% Zn from grab samples. Five mineralized veins consisting of galena, sphalerite and minor chalcopyrite were found during this study. The best assay study returned 0.15% Cu, 2.10% Pb, 9.00% Zn, 21 ppb Au and 5 ppm Ag. High mercury contents (2,620 ppb) are associated with sphalerite (Boyle, 1979). Trenching and drilling (MD-1 and MD-5) by Ryanor Mining Company Limited in 1967-68 intersected a number of barren breccia zones. A trench in the vicinity of MD-1 provides the best surface exposure of these breccias.

b) **Big Hole Brook Pyritic Mafic Volcanic Rocks** (108, 163; Plate 87-61A)

Disseminated pyrite is ubiquitous in many of the mafic flows and tuffs along Big Hole Brook, and these are

occasionally weakly mineralized with base metals.

c) **Big Hole Brook South Tributary** (621, 623, 624, 625; Plate 87-61A)

This occurrence of disseminated pyrite (up to 10% locally) forms a zone of silicified mafic flows in probable fault contact with barren rhyolite. The mafic-felsic contact, marked by a calcite vein 3 m thick, is the site of a vertical falls. The pyritic flows are light coloured (pink/pale green) and felsic in appearance, but, the presence of chlorite amygdules and the high chromium and vanadium contents suggest that they are altered mafic flows. A weak Au-Ag-As-Hg signature is present in 623, and the calcite veins (621 and 625) carry traces of gold (14-20 ppb). All four samples are anomalous in selenium. This tributary of Big Hole Brook was reported to have up to 14.8 ppm Ag in silts taken in 1983 by Northeast Exploration. However, resampling by N. Pitre in 1984 (N.B. File No. 473064) indicated Ag contents of only 0.8-1.2 ppm.

d) **McLean Brook** (113, 174, 189, 627A; Plate 87-61A)

No significant mineral occurrences were noted along McLean Brook, but, the rhyolites are clearly anomalous in Hg (150-780 ppb) and have a weak Pb-Zn signature.

e) **Little Ramsay Brook** (224; Plate 87-61A)

Disseminated pyrite is common throughout many of the

mafic volcanic flows, but, only one sample returned a significant base metal value (1600 ppm Zn).

f) **Big Ramsay Brook** (306, 630, 631, 632, 633; Plate 87-61A)

Specular hematite with traces of chalcopyrite and minor veinlets of jasper in amygdaloidal basalt were noted along the upper reaches of Big Ramsay Brook and at the mouth of a small tributary.

g) **Big Ramsay Brook North Tributary** (329, 330, 331C, 638, 641 642; Plate 87-61A)

This significant pyrite occurrence is associated with strong silicification and an interesting trace-element signature. Disseminated pyrite is ubiquitous in felsic lapilli tuffs but is most abundant (5%) in a pale green, silicified tuff. Trace amounts of gold (up to 24 ppb) were detected in a few samples, and the alteration zone exhibits an association of Bi-Mo-(As).

h) **Big Ramsay Brook South Tributary - Lead Gulch** (322; Plate 87-61A)

This previously explored Pb-Zn showing is located at the falls on Lead Gulch (so-named from 1953 assessment work: N.B. File No. 471992). The occurrence comprises disseminated galena and sphalerite in mafic lapilli tuffs and flows. The showing was reportedly drilled by Jacquet River Mines Limited in 1953 (D.A. Williams, unpublished Mineral Occurrence File),

but, a search of assessment files indicates that the four holes (M-1 to M-4) were collared over a manganese occurrence southeast of the Pb-Zn showing. The drill logs do not mention any manganese mineralization nor was any noted in the vicinity of the drill sites during the course of this survey. The Pb-Zn showing has not been drilled, although the abundance of broken rock suggests that it was blasted. Three additional holes were targeted on resistivity and gravity anomalies and will be discussed in conjunction with the Falls Gulch data.

i) **Little McLean Brook** (673, 675, 676; Plate 87-61A)

No significant mineralization was noted along Little McLean Brook. However, it is of interest because of anomalous arsenic in silts (up to 24 ppm) and an As-Sb-Hg association in the felsic lapilli tuffs.

j) **Falls Gulch and Tributaries** (368, 369, 370A, 370B, 371, 373, 375, 377, 378, 380, 381, 383, 628; Plate 87-61A)

Silt samples taken from this area carried highly anomalous concentrations of Pb, Zn, Ag, As and Sb. Despite the efforts of several exploration companies, no bedrock source has been located that would account for these anomalies (up to 2300 ppm Pb, 8000 ppm Zn, 7 ppm Ag, 44 ppm As and 14 ppm Sb). The silts also ran high in manganese (several were in excess of 10,000 ppm Mn) and it has been assumed that the anomalies were attributable to manganese

scavenging, a possibility mentioned by Boyle *et al.*(1966).

The main rock types exposed in the anomalous area are massive to flow-banded rhyolites and rhyolite flow breccias. The rocks are commonly stained black and red-orange, and sulphide mineralization is sparse. There is nevertheless, a distinct trace-element signature (Hg-Sb-(As)) associated with these rocks that may represent an alteration halo. Small vugs are present in narrow quartz veinlets.

Diamond drilling conducted by Jacquet River Mines Limited in 1953 (M-1 to M-4) was targeted on a manganese showing (F. Cady, p. com.). No manganese mineralization was found in this area and indeed, the Falls Gulch rhyolites are among the most manganese-poor rock types encountered in the volcanic belt. Therefore, not only are the anomalous base metal values in silts unexplained, but also the source of the manganese which was presumed to have scavenged the metals. Of further interest is subsequent drilling by Jacquet River Mines in 1954 (Holes 1, 2 and 3) that was targeted on resistivity lows and gravity anomalies. Overburden thicknesses up to 30 m render soil surveys unreliable and all three holes had to be abandoned at vertical depths ranging from 25 m to 125 m due to vuggy and broken ground conditions.

k) **Wildcat Brook** (240, 242, 243, 648, 679A, 679B; Plate 87-61A)

A narrow vein of massive galena and sphalerite with high silver (1500 ppm), minor copper, and traces of gold (39 ppb)

occurs in a mafic flow at the upper reaches of Wildcat Brook. High mercury concentrations (7,490 ppb) are associated with sphalerite. Samples of float, upstream from this occurrence are weakly mineralized with minor concentrations of Au, Ag, As and Hg.

1) **Hayes Gulch** (403, 404, 405, 406, 413, 417, 420, 424, 425, 427, 687, 688, 689, 690, 693; Plate 87-61A)

Silts in this brook are also geochemically anomalous (up to 220 ppm Cu, 1100 ppm Pb, 2800 ppm Zn, 5 ppm Ag, 30 ppm As and 10,000 ppm Mn). Rock samples generally reflect an enrichment in these elements, although no economic concentrations occur.

In contrast to the Falls Gulch rhyolites, the felsic flows on Hayes Gulch are typically pyritic (up to 2%) and anomalous in base metals. Sulphide mineralization occurs as disseminations and fracture-fillings in flow breccias. Samples from a south tributary are anomalous in Ag (1-28 ppm), As (24-96 ppm), Sb (5.3-18 ppm) and Hg (160-2370 ppb). Sulphide mineralization is evident along fracture surfaces in amygdaloidal mafic flows (424, 425), but not in sample 427 which is a hematitic, vuggy felsic lapilli tuff.

Sample 413 is highly manganiferous (19,000 ppm) and carries a narrow pyrolusite (?) veinlet with minor red hematite.

m) **McNeill Brook Showing** (553, 554, 555, 557, 560; Plate 87-61A)

This occurrence was the only significant discovery arising from the 1966 geochemical release. Trenching and diamond drilling by Noranda Exploration in 1967 (holes N-1, N-2, N-3, N-4; N.B. File No. 472257) delineated low-grade Cu-Zn-Ag mineralization in chloritic basalts and quartz breccia zones (e.g. 0.18% Cu, 0.30% Zn and 0.04 oz/t Ag/ 23.3 m in N-1) and low-grade disseminated and stringer Cu-Pb-Zn mineralization in felsic flows (e.g. 0.05% Cu, 0.58% Pb, and 1.45% Zn/ 6.1 m in N-3). Subsequent drilling by Billiton Exploration Canada Ltd. in 1984 (MB 84-1, MB 84-2, and MB 84-3) intersected similar grades and thickness to a vertical depth of 70 m and confirmed a northerly dip over a strike length of 200 m (G. Lutes, p. com.).

Representative samples of the various styles of mineralization were taken from the trenches:

i) quartz-jasper breccia (553, 560)

ii) sulphide-rich mafic flows (554,555,557)

iii) sulphide-rich felsic flows (550,551,552; see Appendix A)

Only traces of gold were detected in these samples. The altered mafic rocks have a consistent Bi-Mo signature.

Twenty-one samples of Billiton drill core, stored by the Department, were analysed for a number of elements. This data is summarized in Appendix B. No significant gold concentrations were detected.

n) **McNeill Brook** (341, 343, 345, 346, 349A, 349B, 351, 359, 361, 665, 669, 680, 682; Plate 87-61A)

Sulphide mineralization is ubiquitous throughout the mafic volcanic pile along McNeill Brook. The Bi-Mo association noted in the trenches and drill holes clearly extends outside of the main mineralized zone (341, 343, 345, 346, 349A, 349B, 680, 682) indicating the usefulness of the association for massive sulphide exploration. Three samples carry minor concentrations of gold (19-39 ppb) and are anomalous compared with the background levels noted at the showing.

o) **McNeill Brook North Tributary** (388, 389, 684; Plate 87-61A)

This occurrence of quartz-jasper breccia is identical to the breccias at the main showing (described above), but is only 10 cm thick at this locality. The trace-element signature is As-Hg-Bi-Mo. It is worth noting that no further exposures can be seen upstream of this occurrence.

p) **McNeill Brook South Tributary** (663A, 663C, 663D, 663F, 664A, 664B, 664C; Plate 87-61A)

These are all samples of float containing 5-10% disseminated pyrite taken from the stream bed/embankment. They are similar to the pyritic rhyolites from the McNeill Brook showing but are more strongly mineralized in zinc and

carry significant concentrations of mercury. One sample (663F) contained 140 ppb Au. These samples are probably derived from a more strongly mineralized rhyolite flow similar to the rhyolites at the main showing at McNeill Brook. Sample 663D is a mafic rock enriched in Cu-Zn-Sb-Hg-Bi.

q) **Lower McNair Brook** (440, 444, 452, 462, 671, 672A; Plate 87-61A)

Samples 440 and 462 are anomalous in copper but do not carry ubiquitous sulphides. Minor specular hematite occurs in 440.

The most significant mineralization occurs within pillow basalts near a siltstone contact and is stratigraphically equivalent to the McNeill Brook showing. Disseminated pyrite (up to 5%) occurs in chloritic and silicified flows over a wide area and can be traced in talus upslope from outcrops on the brook. Many of these samples are anomalous in molybdenum.

Sample 444 is a quartz breccia vein carrying significant Pb-Zn-Ag-Sb and trace Au.

r) **Upper McNair Brook** (472, 473; Plate 87-61B. 469, 487, 597, 598, 599; Plate 87-61C)

A number of interesting occurrences were noted along Upper McNair Brook. Samples 597-599 were taken in the vicinity of a previouisly known silver showing. The

occurrence appears on Map NR-2 (Mineral Occurrence Map of New Brunswick) as a Cu-Pb-Zn showing, but, unpublished correspondence from 1938 between W.J. Wright of the Department of Lands and Mines, and prospectors D. McIntosh and A. Doyle makes reference to "silver leads" assaying between 2.02 and 25.0 oz/ton Ag and 0.01-0.05 oz/t Au. It is not certain that these same veins were located in this survey but the samples obtained are clearly anomalous in Cu-Pb-Zn-Au-Ag-As-Sb-Bi-Mo. The mineralization consists of disseminated chalcopyrite, galena and pyrite in silicified volcanic and sedimentary(?) breccias. Hematite fracture-fillings are evident in 599. Sample 469 is float from the stream which may represent transported material from this showing. Sample 487, which is very similar to 599, is also float but may be more local in source. These rocks are very similar to sample 888 taken from Rocky Brook (see "v") in the vicinity of a recent Au-Ag discovery.

Samples 472 and 473 are taken from a tributary known to be anomalous in arsenic from the 1966 survey (50-70 ppm) and although the rocks are not particularly enriched in arsenic, they do carry significant amounts of Pb, Zn, Ag, Sb, Hg and Mo. The rocks are bleached rhyolite flows with only trace sulphides and some quartz veining, and are not easily distinguished from barren flows seen throughout the area.

s) **Four Mile Brook** (no samples analyzed; Plates 87-61B and C)

No mineral occurrences are known from Four Mile Brook.

However, for some 800 m upstream from Upper McNair Brook, the rocks have undergone a pale green alteration. The alteration is pervasive and affects both lapilli tuffs and red siltstones, very similar to alteration associated with mineralization at the Rocky Brook showing (see "v"). Samples from this area (39-5; Plate 87-61B. 39-7, 39-8, 39-10 and 39-11; Plate 87-61C) are plotted, but were not analyzed. Sample 39-5 is from rubble of strongly cleaved red siltstone with minor quartz-carbonate veining.

t) **Rocky Gulch** (745; Plate 87-61C)

This sample was taken from a reported pyrite occurrence (O. Hickey, p. com.) near the mouth of Rocky Gulch. The outcrop is a strongly weathered (limonitic) conglomerate or lapilli tuff characterized by iron carbonate alteration. Some fragments are hematitic and an unidentified black mineral occurs on the weathered surface. Pyrite was not observed, but, this zone (about 4 m wide) is the only occurrence of iron carbonate alteration in the northern part of the study area. Iron carbonate alteration is an important feature of gold occurrences associated with faults in the Upsalquitch Forks area. The sample is weakly anomalous in Au (17 ppb), Sb (16 ppm) and Hg (220 ppb).

u) Nine Mile Brook Road (Upsalquitch Forks Gold Showing: 895A, 895B, 896, 897, 898, 899; Plate 87-61D)

This recent Au-Ag-Cu discovery was made by Lacana Mining

Corporation during the summer of 1986. Gossanous material exposed in a roadbed near the Jacquet River Fault returned an assay of 0.3 oz/ton Au. Subsequent trenching revealed an altered mafic intrusion injected by numerous quartz-calcite veins, in fault contact with maroon, porphyritic plagioclase basalt of the Dalhousie Group.

The dominant strike of the veins is 090° to 105° with a dip ranging from 60° to 90° south, coincident with the attitude of the fault contact. A secondary set of veins trends at 140-155° with dips of 60° to 90° southwest. Mineralization is concentrated within two 10 m wide zones containing veins ranging in thickness from a few centimeters to 1 m. Values of up to 1200 ppb Au, 200 ppm Ag and 8.30% Cu were obtained from vein samples. Samples 895A, 895B, 896 and 898 are representative vein material and show a strong enrichment in Hg (up to 6,530 ppb), Bi (up to 723 ppm) and Sb (up to 39 ppm). Samples of the host intrusion (897 and 899) are anomalous in Hg (300-370 ppb), Bi (2.2-5.5 ppm) and Sb (4.2-7.7 ppm) demonstrating the potential of these elements as pathfinders. The showing has been drilled and results are filed confidentially with the Department.

v) **Rocky Brook Showing** (888; Plate 87-61C)

A single sample of what was initially thought to be altered rhyolite was taken from Rocky Brook, immediately upstream of the Charlo Camp haulage road. The rock type is now known to be red siltstone and its alteration is

characterized by abundant hematitic and later chalcedonic veining with a pervasive pale green colouration (sericitization) in the matrix. The sample is highly anomalous in Ag (30 ppm) and Sb (100 ppm), and is weakly anomalous in gold (7 ppb), Pb (120 ppm) and arsenic (100 ppm).

Lacana Mining Corporation staked in this area on the basis of anomalous Au and Ag in till taken by Departmental personnel (Pronk 1986). Follow-up prospecting led to the discovery of black wad (?) reported to be rich in gold and silver (D. Hoy, p. com.). Trenching has provided excellent exposures of the zone along the haulage road and preliminary observations suggest that the mineralization is epithermal in nature. Good ground preparation is evidenced by extensive fracturing of the host rock. Quartz veins have opened up the early hematite veins leading to quartz crystal growth in vugs up to 10 cm in diameter, implying multiple fluid pulses. Fluorite is present in vuggy silica-rich zones, along with an unidentified black, acicular mineral. No mineralogical work has been done. However, samples of the veins and host rocks have been analysed for a number of elements. The analyses indicate that the mineralization is accompanied by highly anomalous amounts of Hg (>1000 ppb), Sb (up to 918 ppm) and As (1400 ppm) with lesser amounts of Cu (up to 108 ppm), Pb (up to 937 ppm), Zn (up to 899 ppm), Ta (up to 13 ppm) and W (up to 12 ppm).

REFERENCES

BOYLE, R.W., TUPPER, W.M., LYNCH, J., FRIEDRICH, G., ZIAUDDIN, M., SHAFIQULLAH, M., CARTER, M. and BYGRAVE, K. 1966. Geochemistry of Pb, Zn, Cu, As, Sb, Mo, Sn, W, Ag, Ni, Co, Cr, Ba and Mn in the waters and stream sediments of the Bathurst - Jacquet River district, New Brunswick. Geological Survey of Canada, Paper 65-42, 50 p.

CARROLL, B.M.W. 1979. Mineral Occurrence Map of New Brunswick. New Brunswick Department of Natural Resources, Map NR-2.

DAVIES, J.L. 1979. Geological Map of Northern New Brunswick. New Brunswick Department of Natural Resources, Map NR-3.

JACQUET RIVER MINES LIMITED 1954. Project 67-1. New Brunswick Department of Natural Resources and Energy, Assessment File No. 471992.

KRAUSKOPF, K.B. 1967. Introduction to geochemistry. McGraw-Hill Inc., New York, NY.

NORANDA EXPLORATION COMPANY LIMITED 1968. McNeill-Hayes Gulch Group, Restigouche County, New Brunswick. New Brunswick Department of Natural Resources and Energy, Assessment File No. 472257.

PITRE, N. 1984. Assessment Report on Big Hole Brook Claim Group. New Brunswick Department of Natural Resources and Energy, Assessment File No. 473064.

PRONK, A.G. 1986. Till geochemistry of Tetagouche Lakes map area (21 O/9), New Brunswick. New Brunswick Department of Forests, Mines and Energy, Geological Notes Series, P.M. 86-216, 10 p.

WILLIAMS, D.A. 1975. McLean Gulch Lead Occurrence. Unpublished Mineral Occurrence File, Department of Natural Resources and Energy, Bathurst Regional Office.

APPENDIX A

Geochemical Data - All Outcrop Samples (numerically)

List of Rock Type Abbreviations

F = felsic	bx = breccia	a = amygdaloidal
M = mafic	v = volcanic	fb = flow-banded
SED = sediment		p = porphyritic
V = vein		t = tuffaceous
I = intrusion		

nd = not detected

NA = not analysed

Rock types are classified on the basis of field note descriptions. The terms "felsic" and "mafic" refer to light and dark colouration and do not necessarily imply acidic or basic compositions. Rocks of uncertain affinities are designated by a question mark.

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
100	21 O/16 B	Big Hole	Mvt	2	14	270	1	nd	6	0.4	7	nd	3
101	21 O/16 B	Big Hole	Mvt	360	13,000	22,000	31	3.0	17	2.4	420	nd	9
102	21 O/16 B	Big Hole	V	1,500	21,000	90,000	21	5.0	23	6.2	2,620	nd	19
103	21 O/16 A	Big Hole	Mv	90	120	500	nd	nd	8	0.3	31	nd	3
104	21 O/16 B	Big Hole	Mva	1	24	120	1	nd	16	1.3	14	nd	4
105	21 O/16 B	Big Hole	Mvt	31	190	320	nd	nd	19	1.7	41	nd	8
106	21 O/16 B	Big Hole	Mv	170	1,400	1,500	nd	nd	35	4.8	62	nd	33
107	21 O/16 B	Big Hole	Mva	74	18	210	nd	nd	4	0.6	14	nd	3
108	21 O/16 A	Big Hole	Mvt	3	38	5,800	nd	nd	18	0.8	34	nd	6
109	21 O/16 A	Big Hole	Fv	2	22	280	nd	nd	10	1.1	31	nd	11
110	21 O/16 A	Big Hole	Mvt	3	26	410	2	nd	20	0.9	34	nd	9
111	21 O/16 A	Big Hole	Mvt	27	8	98	nd	nd	16	0.6	10	nd	3
112	21 O/16 A	Big Hole	Mvt	39	8	160	nd	nd	4	1.2	21	nd	3
113	21 O/16 A	Mclean	Fv bx	6	120	56	nd	nd	22	2.9	150	nd	5
114	21 O/16 A	Big Hole S.Trib	Fvt	15	8	140	nd	nd	17	4.2	59	nd	7
115	21 O/16 A	Big Hole S.Trib	Fv	4	20	170	2	nd	10	3.2	24	nd	3
115A	21 O/16 A	Big Hole S.Trib	Fvt	6	48	65	nd	nd	49	1.8	31	0.1	2
116	21 O/16 A	Big Hole S.Trib	Fvt	6	10	190	nd	nd	24	0.7	14	nd	2
117	21 O/16 A	Big Hole S.Trib	Mvt?	24	10	190	nd	nd	54	1.0	86	nd	3
117A	21 O/16 A	Big Hole S.Trib	Fvt	7	10	170	2	nd	39	0.9	7	0.2	5
118	21 O/16 A	Big Hole S.Trib	Fv	18	12	210	1	nd	32	1.2	10	nd	2
119	21 O/16 A	Big Hole S.Trib	Fv bx	110	16	90	3	nd	71	1.4	14	nd	3
125	21 O/16 A	Big Hole	Fv fb	5	44	110	nd	nd	8	3.8	86	nd	3
126	21 O/16 A	Big Hole	Fvt	7	16	94	nd	nd	9	2.7	21	0.2	3
127	21 O/16 A	Big Hole	Fv fb	6	16	99	nd	nd	4	4.3	50	nd	5
131	21 O/16 B	Big Hole	V	210	1,700	5,800	nd	nd	2	0.4	640	nd	5
135	21 O/16 B	Big Hole	Mva	8	20	160	nd	nd	3	0.5	10	nd	3
138	21 O/16 B	Big Hole	bx	12	4	70	nd	nd	12	0.8	7	0.5	4
142	21 O/16 B	Big Hole	Fv	5	12.0	120	nd	nd	5	0.6	10	nd	3
144	21 O/16 B	Big Hole	Fvt	87	12	240	nd	nd	3	0.6	nd	nd	2
145	21 O/16 B	Big Hole	Mv	7	10	170	nd	nd	17	0.9	14	nd	4
146	21 O/16 A	Big Hole	Fvt	8	8	44	1	nd	30	5.6	14	0.4	3
147	21 O/16 A	Big Hole	Fvt	7	14	110	2	nd	7	1.9	7	0.5	2
151	21 O/16 A	Big Hole	Mva	39	20	130	nd	nd	8	0.8	10	nd	3
152	21 O/16 A	Big Hole	Fv	11	12	28	nd	nd	15	1.3	7	0.3	8
154	21 O/16 A	Big Hole	Mva	72	4	63	1	nd	3	0.5	7	nd	6
156	21 O/16 A	Big Hole	Fv	26	22	130	16	nd	16	0.9	6	nd	12
158	21 O/16 A	Big Hole	V	2	2	150	nd	nd	1	nd	13	nd	2
159	21 O/16 A	Big Hole	Fv bx	15	14	220	9	nd	58	0.6	17	0.3	4
160	21 O/16 A	Big Hole	V	3	2	140	nd	nd	10	0.5	13	nd	3
162	21 O/16 A	Big Hole	Mva	20	14	130	nd	nd	8	1.2	13	nd	7
163	21 O/16 A	Big Hole	Mvt	740	16	170	8	nd	32	1.0	17	0.2	5
164	21 O/16 A	Big Hole	Mv?	18	24	140	2	nd	52	2.2	8	nd	8
165	21 O/16 A	Big Hole	Fvt	16	12	90	1	nd	30	1.2	3	nd	8
166	21 O/16 A	Big Hole	Fvt	5	20	86	7	nd	54	1.0	7	0.1	9
167	21 O/16 A	Big Hole	Fvt	6	24	70	1	nd	33	1.6	7	nd	6
168	21 O/16 A	Big Hole	Fvt	7	6	65	nd	nd	9	2.3	25	0.2	5

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
100	nd	nd	17	43	nd	12	1.20	190	660	1,100	6.20	2.20	1.70	5.10	2.30
101	nd	nd	12	29	120	12	0.87	130	2,200	1,400	5.60	2.20	0.87	2.50	1.30
102	24	nd	6	18	650	12	0.28	44	3,000	540	3.10	0.60	0.60	2.00	0.59
103	nd	nd	34	50	3	88	1.50	230	1,400	1,300	7.70	3.40	0.78	6.80	2.70
104	nd	nd	20	35	nd	10	1.20	170	1,600	1,500	5.80	2.80	1.80	6.70	2.20
105	nd	nd	21	22	1	16	0.46	80	14,000	710	6.80	0.82	1.00	12.00	2.80
106	nd	nd	22	33	7	36	1.00	180	3,300	1,000	4.60	1.10	1.00	7.90	1.50
107	nd	nd	29	34	nd	20	1.00	170	2,000	1,400	5.10	2.30	1.80	4.90	2.30
108	nd	nd	3	6	1	6	0.24	14	860	150	4.30	2.70	1.90	0.89	0.69
109	nd	nd	2	3	1	4	0.08	10	170	70	1.40	0.13	4.70	0.03	0.40
110	nd	nd	2	5	2	4	0.25	12	750	150	4.30	2.00	2.30	0.95	0.68
111	nd	nd	9	41	nd	12	1.10	210	1,200	910	6.30	2.70	0.99	7.80	3.00
112	nd	nd	51	48	nd	110	1.40	240	990	1,200	8.10	2.30	1.40	5.00	4.20
113	8	nd	2	6	nd	2	0.20	8	92	250	2.00	0.14	7.30	0.04	0.08
114	nd	nd	9	31	nd	18	0.89	94	1,800	1,700	6.00	1.30	2.90	2.30	1.80
115	10	nd	60	43	nd	120	1.40	290	4,200	970	8.10	2.20	3.20	5.20	1.90
115A	nd	nd	6	9	nd	4	0.36	10	800	600	2.90	2.50	4.70	0.93	0.11
116	12	nd	21	36	nd	36	0.92	140	1,300	1,200	6.30	2.40	2.10	2.80	0.89
117	10	nd	16	44	nd	8	1.30	190	1,200	1,600	6.70	2.90	3.30	2.30	0.64
117A	nd	nd	15	40	nd	6	1.10	160	1,400	1,700	6.80	2.90	3.50	2.80	0.72
118	14	nd	70	52	nd	120	1.30	240	1,700	890	7.10	3.30	1.00	4.80	2.00
119	6	nd	13	15	nd	10	0.46	40	3,200	560	5.70	0.64	8.80	0.87	0.29
125	9	nd	3	5	nd	2	0.21	12	930	160	1.10	1.30	4.50	2.30	0.29
126	nd	nd	3	6	nd	2	0.26	6	390	150	0.93	1.90	4.00	1.10	0.23
127	nd	nd	3	6	nd	2	0.14	4	1,700	140	2.40	1.10	2.20	4.50	0.30
131	17	nd	4	2	97	10	0.01	16	8,400	70	1.40	0.21	0.07	32.00	0.71
135	8	nd	15	37	1	8	1.20	190	810	1,400	4.60	2.00	1.80	1.70	1.80
138	nd	nd	16	25	nd	16	0.77	130	650	1,300	3.10	1.50	1.60	0.75	0.95
142	9	nd	25	27	nd	14	0.89	160	980	1,300	4.10	2.20	2.30	1.40	1.50
144	11	nd	45	43	1	32	1.10	160	880	1,800	6.40	2.90	1.50	1.60	3.00
145	6	nd	44	43	nd	34	1.20	180	860	2,000	6.20	2.80	2.90	1.50	2.30
146	8	nd	7	6	nd	2	0.07	8	1,700	50	2.20	0.17	4.80	0.88	0.30
147	nd	nd	11	6	nd	6	0.04	22	5,800	70	3.20	0.18	1.30	16.00	1.50
151	8	nd	56	39	nd	110	0.84	160	1,700	1,300	6.30	3.00	1.00	4.10	2.50
152	7	nd	5	6	nd	2	0.08	4	1,100	40	1.90	2.80	1.10	1.30	0.65
154	12	nd	16	23	nd	18	0.60	96	3,000	860	3.40	0.96	1.30	9.20	0.84
156	nd	nd	34	45	nd	16	0.92	180	1,300	1,400	6.00	2.20	1.40	8.00	1.40
158	5	nd	5	14	nd	4	0.016	10	11,000	70	9.20	0.19	0.08	21.00	7.30
159	5	nd	16	27	nd	10	0.67	110	5,000	890	7.70	1.40	1.00	11.00	4.80
160	5	nd	13	16	nd	6	0.083	40	8,300	260	7.50	0.35	0.68	16.00	6.00
162	5	nd	18	49	nd	20	1.30	270	880	1,700	6.70	2.30	1.40	2.90	2.00
163	5	nd	27	55	nd	40	1.30	220	1,000	2,000	7.30	2.80	1.10	2.60	3.20
164	5	nd	15	56	nd	12	1.40	250	950	1,800	7.80	3.30	1.10	2.20	2.10
165	11	nd	9	19	nd	12	0.56	34	1,200	830	3.90	2.00	5.30	1.60	0.42
166	7	nd	7	15	nd	10	0.40	40	1,700	650	4.90	0.97	3.30	3.20	0.49
167	8	nd	3	8	nd	2	0.21	12	1,400	270	2.10	1.10	4.10	1.50	0.30
168	nd	nd	3	7	nd	nd	0.23	14	570	230	2.30	1.10	2.60	1.20	0.73

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
172	21 O/16 A	Mclean	Mvt	5	36	490	nd	nd	8	1.5	50	nd	9
173	21 O/16 A	Mclean	Fv	5	2	190	nd	nd	4	2.0	18	0.2	3
174	21 O/16 A	Mclean	Fvt	9	6	70	nd	nd	3	1.1	160	nd	4
175	21 O/16 A	Mclean	Fvt	100	14	40	4	nd	62	0.8	54	nd	7
176	21 O/16 A	Mclean	Mv bx	7	10	330	nd	nd	22	1.4	28	0.1	5
180	21 O/16 A	Mclean	Fv bx	14	12	26	3	nd	23	5.1	38	nd	8
182	21 O/16 A	Mclean	Fv fb	9	12	32	3	nd	10	3.6	78	nd	4
183	21 O/16 A	Mclean	Fv bx	11	10	43	3	nd	10	3.9	83	nd	5
184	21 O/16 A	Mclean	Fvt	19	8	31	nd	nd	8	3.9	50	0.1	4
185	21 O/16 A	Mclean	Mvt	10	2	130	3	nd	5	2.5	25	0.1	3
189	21 O/16 A	Mclean	Fvt	24	170	510	nd	nd	57	5.6	160	0.2	5
192	21 O/16 A	Mclean	Sed	14	8	58	nd	nd	2	0.3	7	0.1	2
193	21 O/16 B	Big Hole	V	1,600	29,000	52,000	26	8.0	35	6.6	2,700	0.1	12
205	21 O/16 B	Little Ramsay	Fv	22	22	140	nd	nd	5	1.0	57	nd	3
206A	21 O/16 B	Little Ramsay	Fv?	5	50	670	2	nd	14	1.2	170	nd	4
206B	21 O/16 B	Little Ramsay	Mv bx	5	24	310	nd	nd	12	1.5	83	nd	6
207	21 O/16 B	Little Ramsay	Fv?	4	24	380	nd	nd	22	1.8	16	nd	12
208	21 O/16 B	Little Ramsay	Mva	66	150	160	nd	nd	7	0.5	10	0.8	2
209	21 O/16 B	Little Ramsay	Fv bx	1	14	95	nd	nd	6	0.6	10	0.3	4
214	21 O/16 B	Little Ramsay	Fv fb	1	42	26	nd	nd	27	0.6	10	nd	3
215	21 O/16 B	Little Ramsay	Fv	5	26	120	nd	nd	36	1.1	24	nd	5
216	21 O/16 B	Little Ramsay	Fv fb	nd	24	14	nd	nd	36	0.7	10	0.1	3
217	21 O/16 B	Little Ramsay	Mvt	14	20	100	nd	nd	26	1.1	7	nd	3
218	21 O/16 B	Little Ramsay	Fv	1	24	150	4	nd	26	1.8	17	nd	7
224	21 O/16 A	Little Ramsay	Mv bx	5	140	1,600	nd	nd	26	3.7	230	0.2	8
240	21 O/16 B	Wildcat	Mvt	930	24	380	nd	nd	43	1.6	7	0.6	9
241	21 O/16 B	Wildcat	Fv?	13	10	370	nd	nd	4	0.9	16	nd	6
242	21 O/16 B	Wildcat	Fv bx	160	2,800	9,200	18	5.0	32	3.9	1,980	0.2	3
243	21 O/16 B	Wildcat	Mvt	990	25,000	35,000	39	1,500	52	8.5	7,490	0.9	2
244	21 O/16 B	Wildcat	Fv	21	150	180	1	7.0	42	5.4	66	0.2	3
245	21 O/16 B	Wildcat	Fv	20	28	230	nd	1.0	11	2.5	15	nd	3
246	21 O/16 B	Wildcat	Fv	11	24	210	nd	1.5	20	2.7	52	nd	2
247	21 O/16 B	Wildcat	Fv	13	12	130	nd	nd	20	2.5	120	nd	3
247B	21 O/16 B	Wildcat	Fv	12	12	160	nd	nd	20	2.3	140	nd	2
249	21 O/16 B	Wildcat	Fv bx	61	300	710	nd	1.5	43	13.0	110	nd	3
251	21 O/16 B	Little Ramsay	Fv	20	18	75	nd	nd	26	5.0	34	0.8	9
252	21 O/16 B	Little Ramsay	Fv	7	10	37	nd	nd	10	1.0	7	0.1	3
300	21 O/16 B	Big Ramsay	Mva	60	16	290	1	nd	5	1.2	7	0.2	4
302	21 O/16 B	Big Ramsay	Mva	nd	4	250	6	nd	3	0.5	10	0.8	8
304	21 O/16 B	Big Ramsay	Fvt	1	nd	77	nd	nd	9	0.7	10	0.4	21
305	21 O/16 B	Big Ramsay	Fvt?	41	4	170	nd	nd	3	0.7	13	0.5	5
306	21 O/16 B	Big Ramsay	Mva	520	4	340	2	nd	5	0.9	7	0.2	1
307	21 O/16 B	Big Ramsay	Mva	9	12	170	2	nd	10	1.2	7	0.2	3
311	21 O/16 B	Big Ramsay	Mv	8	2	220	4	nd	4	0.9	13	nd	5
314	21 O/16 B	Big Ramsay	Fv	11	4	13	nd	nd	10	0.7	21	0.5	4
316A	21 O/16 B	Big Ramsay	Fv	nd	4	100	nd	nd	8	2.7	10	0.4	2
316B	21 O/16 B	Big Ramsay	Fv fb	2	4	26	nd	nd	8	1.0	110	nd	5
317	21 O/16 B	Big Ramsay	Fv	12	26	140	nd	nd	21	0.6	140	nd	6
318	21 O/16 B	Big Ramsay	Fvt	3	14	180	nd	nd	11	0.7	10	0.3	3
319	21 O/16 B	Big Ramsay	Fv bx	11	24	140	1	nd	29	2.3	48	0.9	7

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
172	5	nd	20	63	nd	32	1.50	290	1,900	1,600	8.00	0.48	5.90	1.90	1.90
173	nd	nd	2	6	nd	nd	0.18	10	130	170	2.30	1.30	3.90	0.05	0.40
174	nd	nd	3	5	nd	2	0.13	14	810	130	2.00	2.20	3.30	1.70	0.39
175	5	nd	3	10	nd	2	0.12	10	420	120	2.40	3.00	1.60	0.88	0.32
176	nd	nd	13	44	nd	30	1.50	280	1,300	1,700	7.60	3.00	0.80	2.80	2.80
180	8	nd	3	8	nd	2	0.09	12	1,800	80	1.90	0.37	3.40	0.87	0.21
182	8	nd	2	7	nd	2	0.12	24	640	80	2.30	0.58	5.50	0.39	0.21
183	7	nd	4	13	nd	6	0.18	30	2,000	220	2.70	0.49	4.80	1.80	0.35
184	nd	nd	3	8	nd	4	0.15	12	1,000	160	2.80	0.50	4.00	0.61	0.18
185	nd	nd	7	22	nd	10	0.35	52	2,200	550	6.00	0.48	2.50	2.50	1.50
189	nd	nd	34	42	3	50	0.62	84	570	710	5.20	0.49	1.40	0.96	0.80
192	nd	nd	42	17	nd	68	0.39	64	1,400	460	3.30	1.60	0.91	1.50	1.20
193	7	nd	8	12	560	8	0.073	18	3,200	240	2.20	0.090	0.31	1.60	0.43
205	nd	nd	16	34	nd	32	1.30	230	1,700	1,300	5.90	2.00	5.20	7.90	1.30
206A	nd	nd	7	36	1	8	1.20	220	1,000	1,700	7.00	2.00	3.60	0.80	2.40
206B	nd	nd	4	23	nd	4	1.00	140	830	1,500	5.10	2.00	2.30	2.90	2.40
207	nd	nd	4	23	nd	2	1.00	86	730	2,100	6.10	2.40	3.30	3.00	1.60
208	nd	nd	75	64	nd	46	1.50	210	2,100	950	9.30	4.20	0.07	6.40	3.00
209	nd	nd	9	20	nd	6	0.87	60	950	1,700	4.40	4.10	2.20	2.50	1.00
214	nd	nd	3	5	nd	4	0.22	12	88	180	1.10	0.53	6.90	0.04	0.06
215	nd	nd	5	17	nd	6	0.77	66	1,100	1,500	4.70	2.30	4.50	2.80	0.72
216	nd	nd	4	4	nd	4	0.22	12	28	150	0.46	0.23	7.60	0.02	0.06
217	6	nd	29	37	nd	100	1.10	190	1,700	850	7.80	2.90	1.90	6.40	0.87
218	nd	nd	6	22	nd	6	0.89	72	1,200	1,900	5.00	3.00	2.40	3.30	0.84
224	5	nd	12	48	3	4	0.94	190	2,500	3,000	9.50	1.20	2.30	1.20	1.70
240	nd	nd	11	15	nd	20	0.33	78	1,700	340	4.90	0.80	5.50	0.07	0.66
241	7	nd	21	39	2	19	0.94	200	3,300	720	6.00	1.20	4.40	3.20	1.30
242	14	nd	9	14	41	6	0.39	48	1,800	660	3.10	0.14	7.60	0.69	0.20
243	33	nd	9	41	130	24	0.73	170	3,400	580	5.00	0.54	3.00	1.50	2.40
244	7	nd	3	10	nd	2	0.44	30	140	640	2.20	0.12	7.40	0.03	0.064
245	7	nd	8	43	nd	16	1.40	270	2,800	1,400	7.70	1.10	5.80	2.30	2.40
246	12	nd	7	43	nd	16	1.30	260	3,600	1,100	7.90	0.17	7.20	3.30	2.00
247	10	nd	8	38	nd	12	0.85	150	2,000	940	5.40	1.40	3.40	2.30	0.71
247B	10	nd	7	34	1	12	0.77	140	2,400	840	5.70	1.30	3.50	3.90	1.30
249	9	nd	10	39	2	16	1.00	200	2,800	900	5.20	0.18	7.40	1.00	0.31
251	nd	nd	5	21	nd	nd	0.73	50	510	1,600	3.90	2.50	4.20	0.59	0.59
252	6	nd	4	6	nd	nd	0.18	6	810	210	2.20	2.40	2.60	0.06	0.13
300	6	nd	41	42	nd	26	1.40	210	2,300	1,500	5.60	2.50	1.70	4.60	2.20
302	nd	nd	13	48	nd	16	1.50	120	2,100	3,300	10.00	3.10	0.15	3.60	2.60
304	6	nd	4	8	nd	nd	0.19	8	480	140	2.60	1.90	4.00	0.06	0.06
305	5	nd	22	26	nd	60	0.38	52	1,500	290	5.10	1.70	3.00	0.09	1.10
306	nd	nd	98	31	nd	180	1.00	180	2,100	800	13.00	1.90	0.12	4.20	3.90
307	9	nd	110	60	nd	210	0.97	170	1,800	800	6.40	2.90	0.08	5.00	4.60
311	5	nd	73	51	nd	96	0.82	190	1,900	580	5.60	3.50	0.54	6.60	2.60
314	nd	nd	2	3	nd	nd	0.10	2	36	100	2.00	0.85	5.30	0.04	0.06
316A	nd	nd	3	8	nd	4	0.16	8	990	340	2.70	3.20	1.10	0.07	0.13
316B	nd	nd	nd	2	nd	2	0.12	4	44	210	2.00	0.13	6.70	0.02	0.03
317	nd	nd	5	19	nd	6	1.00	110	830	1,400	4.50	3.40	2.60	1.80	0.74
318	6	nd	8	13	nd	10	0.30	20	690	310	2.50	0.70	5.00	0.86	0.13
319	6	nd	9	25	nd	6	1.00	130	1,800	1,000	4.20	0.20	7.30	2.70	0.27

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
320	21 O/16 B	Big Ramsay	Fvt	42	40	31	1	nd	11	0.9	26	1.8	7
322	21 O/16 B	Pb Gulch	Mv	46	3,100	12,000	nd	nd	6	0.6	680	3.8	3
323	21 O/16 B	Big Ramsay	Fv bx	49	54	92	nd	nd	29	12.0	21	0.6	9
325	21 O/16 B	Big Ramsay	Mva	320	nd	240	nd	nd	3	0.3	8	0.1	4
327	21 O/16 B	Big Ramsay	Fvt	6	6	16	1	nd	8	0.9	13	0.2	4
328	21 O/16 B	Big Ramsay	Fvt	5	2	50	nd	nd	7	1.2	8	nd	4
328A	21 O/16 B	Big Ramsay	Fvt	4	2	98	nd	nd	6	1.5	8	nd	4
329	21 O/16 B	N.Trib.B. Ramsay	Mv bx	30	98	450	7	nd	66	1.0	41	61.0	92
330	21 O/16 B	N.Trib.B. Ramsay	Mvt	20	14	99	2	nd	45	0.8	38	31.0	17
331A	21 O/16 B	N.Trib.B. Ramsay	Fvt	56	4	44	nd	nd	11	0.7	13	1.5	7
331B	21 O/16 B	N.Trib.B. Ramsay	Mvt	170	10	180	4	nd	17	1.0	18	1.6	7
331C	21 O/16 B	N.Trib.B. Ramsay	Fvt	74	16	51	24	nd	32	1.9	4	1.3	12
331D	21 O/16 B	N.Trib.B. Ramsay	Fvt	420	6	100	nd	nd	5	0.6	4	0.6	6
332	21 O/16 B	Pb Gulch	Mvt?	8	280	950	1	nd	20	2.4	39	0.3	4
333	21 O/16 B	Pb Gulch	Fvt	32	8	210	nd	nd	8	0.7	7	0.6	2
334	21 O/16 B	N.Trib.B. Ramsay	Mvt	5	14	690	1	nd	13	0.4	7	0.3	5
335	21 O/16 B	N.Trib.B. Ramsay	Fvt	7	12	180	nd	nd	12	0.7	21	0.4	2
336	21 O/16 B	N.Trib.B. Ramsay	Fv bx	10	24	170	2	nd	15	2.2	81	1.7	23
337	21 O/16 B	McNeill	Mva	66	10	130	nd	nd	6	0.6	5	0.3	6
341	21 O/16 B	McNeill	Mv	370	56	530	nd	nd	22	1.4	41	8.6	13
343	21 O/16 B	McNeill	Fv	34	20	69	2	nd	9	0.8	nd	1.3	18
344	21 O/16 B	McNeill	Fv	10	12	110	nd	nd	6	0.8	nd	0.6	7
345	21 O/16 B	McNeill	Fv bx	230	14	210	nd	nd	26	3.2	21	1.8	10
346	21 O/16 B	McNeill	Fvt	170	26	330	nd	nd	15	0.9	11	6.7	5
347	21 O/16 B	McNeill	Mv	49	12	140	nd	nd	37	1.0	19	nd	10
349A	21 O/16 B	McNeill	V	190	62	34	nd	nd	100	3.2	35	18.0	31
349B	21 O/16 B	McNeill	V	350	60	140	1	nd	100	2.6	80	28.0	160
350	21 O/16 B	McNeill	Fv	13	44	380	nd	nd	20	0.9	56	nd	6
351	21 O/16 B	McNeill	Fv?	210	310	110	25	nd	200	4.3	59	nd	5
352	21 O/16 B	McNeill	Fv?	20	58	320	3	nd	66	1.9	21	0.1	7
353	21 O/16 B	McNeill	Fv bx	59	16	230	nd	nd	47	1.5	34	0.2	7
354	21 O/16 B	McNeill	Fv bx	72	54	290	nd	nd	190	2.1	21	0.4	8
355	21 O/16 B	McNeill	Fv	120	96	400	3	nd	61	4.4	19	0.4	8
356	21 O/16 B	McNeill	Fv?	6	12	280	nd	nd	10	1.3	5	nd	8
357A	21 O/16 B	McNeill	Fv bx	30	22	290	nd	nd	16	1.5	40	0.5	6
357B	21 O/16 B	McNeill	Fv	6	18	290	1	nd	12	1.8	nd	nd	8
358	21 O/16 B	McNeill	Fvt	10	28	350	nd	nd	12	1.1	21	0.4	5
359	21 O/16 B	McNeill	Fvt	46	230	1,400	nd	nd	7	2.5	190	nd	3
360	21 O/16 B	McNeill	Mva	52	170	850	nd	nd	16	1.2	52	nd	2
361	21 O/16 B	McNeill	Mvt	50	410	1,000	nd	nd	9	0.5	62	nd	2
362	21 O/16 B	McNeill	Mvt?	12	24	250	1	0.5	18	1.4	94	nd	2
363	21 O/16 B	McNeill	Mvt	170	28	130	6	1.5	39	3.0	53	0.1	8
364	21 O/16 B	McNeill	Fvt	18	8	140	nd	nd	15	0.8	14	nd	2
366	21 O/16 B	Falls Gulch	Mv	52	10	130	nd	nd	17	0.9	120	nd	6
367	21 O/16 B	Falls Gulch	Fvt	4	6	180	nd	nd	9	2.2	140	0.1	3
368	21 O/16 B	Falls Gulch	Fv	7	18	86	nd	nd	16	3.9	170	0.1	2
369	21 O/16 B	Falls Gulch	Fv	12	100	150	nd	nd	160	9.1	360	0.1	3
370A	21 O/16 B	Falls G. N.Trib	Fvt	7	20	130	nd	nd	59	11.0	310	0.1	2
370B	21 O/16 B	Falls G. N.Trib	Fv bx	5	18	270	2	nd	23	10.0	81	0.1	2
371	21 O/16 B	Falls G. N.Trib	Fvt	7	58	180	nd	0.5	69	9.8	250	nd	2

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
320	nd	nd	3	6	nd	4	0.12	nd	210	100	2.20	0.27	7.00	0.03	0.04
322	nd	nd	18	44	42	36	1.20	210	3,700	860	7.80	3.60	0.07	3.10	2.30
323	nd	nd	3	7	nd	nd	0.14	4	430	140	1.90	1.50	4.30	0.05	0.12
325	5	nd	83	62	nd	120	1.10	220	1,500	280	8.10	1.80	1.00	6.00	3.50
327	nd	nd	2	4	nd	2	0.15	6	86	100	1.80	0.13	7.40	0.03	0.05
328	5	nd	3	6	nd	4	0.16	6	250	130	2.80	0.78	4.00	0.03	0.20
328A	5	nd	3	7	nd	2	0.18	10	750	240	3.70	1.80	4.00	0.05	0.50
329	5	nd	9	80	nd	8	0.79	140	2,800	810	16.00	1.70	0.05	0.11	4.30
330	5	nd	16	41	nd	12	0.63	100	980	790	6.60	2.50	0.40	0.12	1.60
331A	5	nd	2	11	nd	2	0.21	14	250	220	1.80	0.21	7.80	0.15	0.38
331B	5	nd	19	39	1	64	0.86	200	1,700	870	6.20	2.40	3.30	1.20	2.00
331C	nd	nd	2	12	nd	nd	0.20	12	410	190	2.30	0.22	7.80	0.05	0.51
331D	5	nd	4	16	1	2	0.20	20	760	190	3.40	0.17	7.20	0.06	1.00
332	nd	nd	19	48	6	38	1.30	310	3,400	1,000	7.90	2.30	1.30	2.90	3.40
333	nd	nd	5	9	nd	8	0.21	36	1,200	220	3.10	0.09	3.30	0.46	0.30
334	5	nd	17	48	1	6	0.86	170	2,800	900	5.90	3.00	0.76	1.80	1.50
335	nd	nd	7	11	nd	10	0.23	38	610	220	2.90	1.10	4.50	0.07	0.11
336	nd	nd	10	39	nd	14	0.89	170	2,400	960	5.00	0.22	6.60	0.67	0.28
337	6	nd	42	51	nd	78	1.10	150	1,200	1,200	8.20	2.90	1.40	2.10	2.80
341	13	nd	52	50	3	68	0.33	64	2,400	340	8.10	0.69	1.80	1.50	1.80
343	16	nd	3	15	nd	8	0.14	4	140	140	2.20	0.15	6.20	0.02	0.11
344	15	nd	3	18	nd	8	0.14	4	460	180	2.50	0.15	5.70	0.27	0.17
345	6	nd	4	10	2	2	0.083	8	970	90	2.20	0.07	3.20	0.56	0.23
346	7	nd	30	56	nd	47	0.84	160	2,000	1,100	9.60	0.34	4.60	0.14	1.50
347	6	nd	21	67	nd	54	1.90	360	1,500	1,500	8.40	2.50	1.30	4.70	2.70
349A	nd	nd	2	9	nd	12	0.27	60	140	380	7.70	0.33	0.82	0.05	0.19
349B	nd	nd	9	39	nd	18	0.31	64	1,000	320	8.00	0.12	0.45	0.05	0.96
350	nd	nd	25	37	nd	47	0.91	180	2,300	1,100	6.50	2.50	5.10	1.20	1.50
351	nd	nd	8	31	1	4	0.86	52	1,100	2,300	5.50	3.60	0.53	0.99	1.10
352	5	nd	11	67	nd	12	1.40	320	1,400	1,100	7.60	1.30	3.60	0.15	1.60
353	6	nd	9	66	nd	10	1.20	360	2,100	1,100	7.60	1.70	3.50	2.30	1.30
354	nd	nd	11	81	nd	13	1.30	290	990	1,200	8.10	3.50	1.30	0.15	0.40
355	nd	nd	11	77	2	13	1.80	500	2,100	1,300	7.70	2.00	4.80	1.20	0.43
356	5	nd	15	78	1	17	1.70	520	2,900	1,400	9.60	4.80	0.71	2.40	1.40
357A	5	nd	6	39	nd	6	1.10	140	2,100	2,300	6.70	1.60	5.20	1.40	0.66
357B	5	nd	7	37	nd	11	1.20	190	1,900	2,800	7.90	2.10	6.60	1.30	0.49
358	nd	nd	14	24	nd	18	0.75	70	1,600	620	6.50	0.49	5.30	0.31	1.10
359	nd	nd	19	27	4	28	1.00	140	3,400	1,700	6.70	0.38	7.70	2.00	1.00
360	nd	0.4	68	35	2	90	0.52	130	3,400	610	5.60	1.70	2.40	11.00	1.60
361	nd	0.4	69	35	5	86	0.61	130	2,900	360	6.10	2.50	0.98	3.20	2.60
362	nd	nd	43	27	nd	78	0.47	98	2,600	590	5.20	0.77	3.20	3.80	2.20
363	nd	nd	66	48	1	160	0.96	210	810	1,000	6.10	0.52	6.50	2.10	1.20
364	6	nd	32	28	nd	44	0.43	88	1,600	430	5.70	0.61	3.80	6.20	1.30
366	nd	nd	26	58	nd	44	1.40	340	1,600	1,200	8.10	2.80	0.63	8.00	2.50
367	nd	nd	3	4	nd	nd	0.15	6	250	150	1.40	0.11	8.40	0.03	0.08
368	nd	nd	3	4	nd	nd	0.13	4	40	130	1.70	0.05	4.10	0.02	0.12
369	nd	nd	2	4	5	nd	0.13	4	50	140	2.60	0.07	3.30	0.03	0.16
370A	nd	nd	3	4	nd	nd	0.11	nd	670	120	1.70	0.08	5.00	0.03	0.04
370B	nd	nd	3	4	nd	nd	0.13	6	200	80	4.30	0.08	3.60	0.03	0.03
371	nd	nd	2	5	nd	nd	0.11	nd	1,500	100	2.70	0.08	4.50	0.03	0.06

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
372	21 O/16 B	Falls G. N. Trib	Fv	7	8	51	nd	nd	61	2.5	29	0.1	2
373	21 O/16 B	Falls G. N. Trib	Fv fb	5	38	150	nd	1.0	23	6.7	340	nd	2
374	21 O/16 B	Falls G. N. Trib	Fv fb	5	50	240	nd	nd	22	7.6	35	nd	2
375	21 O/16 B	Falls G. N. Trib	Fv fb	5	44	150	nd	nd	22	10.0	17	nd	2
377	21 O/16 B	Falls G. N. Trib	Fvt	64	1,000	1,600	nd	7.0	340	14.0	5,010	0.1	4
378	21 O/16 B	Falls Gulch	Fv	4	30	93	nd	0.5	33	3.8	420	nd	2
380	21 O/16 B	Bear Trap Rd.	Fvt	18	26	50	nd	nd	47	19	520	0.1	3
381	21 O/16 B	Falls Gulch	Fv	7	20	120	nd	nd	12	2.9	210	nd	2
383	21 O/16 B	Falls Gulch	Fv bx	14	120	360	nd	nd	17	3.2	1,240	0.3	3
386A	21 O/16 B	McNeill S. Trib.	Fv	17	64	390	nd	nd	100	2.3	24	nd	4
386B	21 O/16 B	McNeill S. Trib.	Fv?	41	58	970	nd	nd	27	3.1	140	nd	7
387	21 O/16 B	McNeill N. Trib.	Mvt	5	20	210	nd	nd	24	1.3	97	1.4	5
388	21 O/16 B	McNeill N. Trib.	Mvt	57	88	1,400	nd	nd	44	1.8	130	1.8	8
389	21 O/16 B	McNeill N. Trib.	bx	290	710	11,000	7	1.0	200	3.3	1,320	5.8	51
392	21 O/16 B	McNeill N. Trib.	Mvt?	64	16	130	2	nd	13	0.4	6	nd	3
393	21 O/16 B	McNeill N. Trib.	Fv	8	16	240	4	nd	7	1.2	11	nd	2
400	21 O/16 B	Hayes Gulch	Fvt	5	10	210	nd	nd	6	1.4	7	0.1	5
401	21 O/16 B	Hayes Gulch	Fv	28	120	360	nd	nd	25	2.8	7	0.2	3
402	21 O/16 B	Hayes Gulch	Fvt	7	30	130	nd	nd	4	3.0	13	nd	3
403	21 O/16 B	Hayes Gulch	Fvt?	26	440	1,100	nd	0.5	21	2.9	42	0.1	5
404	21 O/16 B	Hayes Gulch	Fv bx	63	110	1,800	nd	nd	25	1.7	28	0.6	6
405	21 O/16 B	Hayes Gulch	Fvt	230	2,800	2,000	6	nd	19	1.7	140	0.3	16
406	21 O/16 B	Hayes Gulch	Fv?	32	340	840	5	nd	55	1.8	230	0.1	5
407	21 O/16 B	Hayes Gulch	Fvt	9	20	130	1	nd	4	1.5	13	nd	3
408	21 O/16 B	Hayes Gulch	Fvt	5	40	290	nd	nd	12	1.2	9	0.2	9
409	21 O/16 B	Hayes Gulch	Fvt	5	18	260	nd	nd	5	0.8	7	nd	7
413	21 O/16 B	Hayes Gulch	Fvt	32	38	570	2	nd	110	4.2	13	0.2	3
415	21 O/16 B	Hayes Gulch	Fv?	17	66	260	nd	nd	11	3.5	33	nd	9
417	21 O/16 B	Hayes Gulch	Fv bx	30	260	960	nd	1.0	81	4.6	88	nd	6
418	21 O/16 B	Hayes Gulch	Fv bx	20	88	560	nd	nd	30	2.0	17	0.1	3
419	21 O/16 B	Hayes Gulch	Fvt	23	220	120	nd	nd	17	3.2	55	nd	5
420	21 O/16 B	Hayes Gulch	Fv bx	32	90	270	3	nd	36	3.5	180	nd	6
423	21 O/16 B	Hayes Gulch	Mv?	11	28	160	nd	nd	46	4.6	13	nd	3
424	21 O/16 B	Hayes Gulch	Mva	31	16	150	nd	1.0	24	5.5	160	nd	7
425	21 O/16 B	Hayes Gulch	Mva	84	56	550	nd	6.0	96	5.3	990	nd	4
427	21 O/16 B	Hayes Gulch	Fvt	19	420	420	nd	28.0	64	18.0	2,370	nd	3
435	21 O/16 B	Hayes Gulch	Mv	37	2	56	nd	nd	9	1.7	240	nd	1
436	21 O/16 B	Hayes Gulch	Fv bx	18	26	160	nd	nd	37	3.5	190	nd	4
438	21 O/16 B	Lower McNair	Mvt?	10	32	150	4	nd	48	1.3	35	nd	3
439	21 O/16 B	Lower McNair	Fv	2	20	210	nd	nd	24	1.5	25	0.2	1
440	21 O/16 B	Lower McNair	Mv	930	6	200	1	2.0	11	1.0	8	0.7	4
442	21 O/16 B	Lower McNair	Mv?	7	4	150	nd	nd	9	2.1	5	0.3	4
443	21 O/16 B	Lower McNair	Mv?	28	4	64	nd	nd	9	0.3	40	nd	nd
444	21 O/16 B	Lower McNair	V	51	3,100	7,600	9	15.0	43	13.0	75	nd	4
447	21 O/16 B	Lower McNair	Mv?	86	nd	110	3	nd	4	0.2	8	nd	2
450	21 O/16 B	Lower McNair	Fv	13	100	74	nd	0.5	75	5.7	66	nd	9
452	21 O/16 B	Lower McNair	Mv	24	58	150	2	1.5	580	7.7	75	0.2	36
453	21 O/16 B	Lower McNair	Mv bx	30	52	240	6	1.0	85	1.2	45	nd	20
454	21 O/16 B	Lower McNair	Mvt	40	10	190	2	nd	41	2.6	24	nd	2
455	21 O/16 B	Lower McNair	Mv?	28	20	250	3	nd	70	1.0	40	nd	6

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
372	nd	nd	2	4	nd	nd	0.14	6	170	300	1.90	0.06	5.80	0.02	0.06
373	6	nd	2	3	nd	4	0.14	4	78	130	1.60	0.12	4.80	0.02	0.05
374	8	nd	2	3	nd	nd	0.11	4	38	130	1.10	0.11	7.50	0.03	0.091
375	9	nd	2	3	nd	2	0.13	6	48	140	2.10	0.12	7.40	0.03	0.074
377	7	nd	4	3	5	4	0.075	8	190	110	6.00	0.08	4.40	0.03	0.084
378	nd	nd	2	3	nd	2	0.13	10	88	40	3.00	0.092	6.50	0.03	0.11
380	nd	nd	5	8	nd	nd	0.11	8	8,600	130	2.00	0.15	6.10	0.08	0.13
381	nd	0.2	4	3	nd	nd	0.13	2	190	70	2.50	0.11	4.60	0.04	0.15
383	nd	nd	4	4	6	2	0.13	8	470	130	0.87	0.15	6.00	0.03	0.07
386A	nd	nd	8	39	nd	10	1.10	72	690	1,500	7.90	2.40	2.60	1.80	0.16
386B	nd	nd	7	56	3	6	1.80	380	5,100	1,500	8.30	0.77	5.60	3.00	1.50
387	5	nd	24	47	nd	40	0.83	160	1,200	560	6.70	1.90	3.00	1.20	1.10
388	5	nd	24	46	6	40	0.81	160	2,400	1,100	7.20	1.10	5.30	1.20	1.70
389	5	nd	16	48	50	22	0.50	130	3,600	670	9.80	0.34	1.90	2.00	1.90
392	nd	nd	85	37	1	170	0.75	210	2,000	770	6.60	3.90	2.60	3.30	2.30
393	nd	nd	7	10	1	6	0.33	20	2,700	500	5.30	0.15	7.80	0.42	0.32
400	nd	nd	12	37	1	14	1.20	190	1,500	2,000	8.80	3.30	1.50	1.50	0.47
401	nd	nd	10	17	1	6	0.33	46	1,700	410	5.60	2.30	3.10	0.66	0.44
402	nd	nd	3	8	nd	4	0.20	24	400	320	3.10	0.75	5.40	0.04	0.06
403	5	nd	5	20	4	6	0.76	50	2,400	1,400	5.40	1.80	4.10	0.86	0.80
404	5	nd	4	19	9	6	0.62	46	2,200	980	5.30	1.20	3.50	0.91	0.60
405	nd	nd	12	25	9	34	0.87	98	910	1,500	5.40	1.40	4.20	0.63	0.66
406	nd	nd	9	26	5	22	0.84	94	1,700	1,900	6.20	1.30	4.20	0.72	1.10
407	nd	nd	3	3	nd	nd	0.081	4	410	100	1.60	0.11	3.40	0.01	0.02
408	nd	nd	5	7	nd	6	0.16	24	1,100	200	2.40	0.88	4.90	0.05	0.36
409	nd	nd	6	9	1	12	0.17	30	1,100	200	2.70	1.40	4.20	0.07	0.34
413	nd	nd	4	10	4	nd	0.07	4	19,000	110	2.40	0.10	6.20	0.08	0.13
415	nd	nd	7	33	2	10	0.89	58	690	970	3.50	3.00	1.10	1.10	0.23
417	nd	nd	11	31	6	10	0.66	140	2,000	770	3.60	0.17	6.70	0.72	0.03
418	nd	nd	14	42	1	30	1.10	200	9,500	850	8.10	1.80	3.10	5.80	1.70
419	nd	nd	4	12	nd	8	0.59	52	60	850	2.70	0.16	4.30	0.06	0.09
420	nd	nd	7	4	2	6	0.11	12	68	90	1.70	0.13	7.10	0.02	0.04
423	nd	0.1	66	55	nd	180	1.30	320	2,000	960	8.00	3.50	1.70	2.30	4.30
424	5	nd	36	41	2	180	1.30	300	3,300	980	6.50	0.16	7.00	6.10	1.00
425	nd	0.6	33	38	11	110	0.99	270	4,000	780	6.50	0.18	6.60	12.00	0.87
427	nd	nd	8	10	nd	nd	0.25	36	120	390	2.00	0.11	7.10	0.06	0.07
435	17	nd	31	28	nd	94	0.59	120	2,900	550	5.10	0.30	4.80	18.00	0.57
436	nd	nd	7	29	nd	11	0.62	170	3,400	560	6.00	0.12	1.40	3.10	1.60
438	7	nd	12	10	nd	2	0.15	40	1,900	170	4.70	0.12	5.90	3.40	0.92
439	6	nd	11	9	nd	10	0.24	24	1,400	360	5.90	0.11	6.30	0.58	0.37
440	nd	nd	7	47	nd	nd	1.60	140	1,600	4,400	9.30	3.00	0.18	2.70	3.40
442	nd	nd	72	44	nd	170	0.80	150	1,800	830	8.70	3.20	0.24	4.40	3.70
443	nd	nd	48	27	nd	26	0.22	98	1,400	110	5.70	0.15	0.65	3.90	0.89
444	6	nd	6	8	46	nd	0.012	76	4,300	50	2.60	0.09	0.18	5.70	0.33
447	nd	nd	32	49	nd	56	0.97	250	1,400	930	6.80	2.90	0.13	8.50	3.60
450	nd	nd	6	10	3	6	0.14	16	430	140	1.20	3.60	0.27	1.30	0.07
452	nd	nd	40	68	nd	20	1.40	400	2,300	1,400	7.80	4.30	0.20	2.80	1.10
453	nd	nd	11	42	nd	4	0.98	240	1,500	1,300	8.70	2.80	0.50	1.40	0.85
454	16	nd	57	43	nd	70	0.49	150	2,500	770	7.10	0.73	2.40	4.40	1.40
455	nd	nd	13	39	nd	14	1.40	290	1,000	1,600	8.90	4.10	0.89	1.60	0.81

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
456	21 O/16 B	Lower McNair	Fvt	15	24	180	nd	nd	64	1.6	46	nd	10
460A	21 O/16 B	Lower McNair	Fvt	4	10	82	2	nd	16	0.9	8	0.3	4
460B	21 O/16 B	Lower McNair	Mvt	7	6	97	nd	nd	28	0.7	5	0.3	11
460C	21 O/16 B	Lower McNair	Mvt	160	nd	76	nd	nd	20	1.0	5	0.1	4
461	21 O/16 B	Lower McNair	Fvt	26	14	200	nd	nd	13	1.2	14	nd	2
462	21 O/16 B	Lower McNair	Mv?	610	2	67	nd	nd	21	0.4	13	1.2	8
463A	21 O/16 B	Lower McNair	Fv	11	14	20	nd	nd	150	1.7	38	0.7	11
463B	21 O/16 B	Lower McNair	Fv	5	6	36	nd	nd	65	1.0	13	0.4	6
465	21 O/16 B	Lower McNair	Fv bx	10	6	12	nd	nd	54	0.9	30	0.1	2
466	21 O/16 B	Lower McNair	Fv bx	7	12	220	nd	nd	10	0.5	9	0.4	7
469	21 O/9 F	Upper McNair	V bx	3,600	800	900	3	25	19	13.0	nd	12.9	4
471	21 O/9 G	Upper McNair	Hva	87	2	120	nd	nd	180	2.3	11	0.1	2
472	21 O/9 G	Upper McNair	Fv bx	44	310	350	nd	12.0	73	78.0	1,490	0.2	15
473	21 O/9 G	Upper McNair	Fvt	10	4,800	1,000	3	1.0	27	4.1	200	0.2	16
474	21 O/9 G	Upper McNair	Fv bx	38	12	270	nd	nd	20	1.5	24	0.1	3
475	21 O/9 G	Upper McNair	Fvt	26	240	230	nd	nd	32	1.1	29	0.1	11
477	21 O/9 G	Upper McNair	Fv bx	5	8	530	nd	nd	5	1.3	15	0.2	3
481	21 O/9 G	Upper McNair	Mv bx	45	2	120	nd	nd	6	0.2	9	nd	6
487	21 O/9 F	Upper McNair	Sed	18	350	54	nd	13.0	71	6.6	24	9.7	1
489 F	21 O/9 G	Upper McNair	Mvt	20	4	72	4	0.5	11	nd	7	nd	4
500	21 O/16 A	Ryanor Tr # 1	Fv	12	32	170	nd	nd	37	1.5	28	0.1	9
501	21 O/16 A	Ryanor Tr # 1	Fv	25	18	210	2	nd	20	1.3	41	0.1	11
502	21 O/16 A	Ryanor Tr # 1	Fv	18	22	240	3	nd	22	1.2	38	0.1	11
503	21 O/16 A	Ryanor Tr # 1	V	7	12	140	nd	nd	22	4.7	17	nd	7
505	21 O/16 A	Ryanor Tr # 2	Fv	4	12	54	1	nd	12	1.3	10	0.2	6
507	21 O/16 A	Ryanor Tr # 2	Fvt	7	62	27	nd	nd	7	1.5	31	0.2	6
510	21 O/16 A	Ryanor Tr # 3	Fv bx	21	96	250	2	3.5	65	2.7	41	0.1	17
512	21 O/16 A	Ryanor Tr # 4	Mv?	57	30	200	nd	nd	8	0.4	46	0.1	4
521	21 O/16 A	Ryanor Tr # 4	Mv?	8	14	130	10	nd	17	1.0	11	0.1	3
530	21 O/16 A	Ryanor Tr # 1	Fv	3	24	35	3	nd	6	1.5	11	0.1	3
550	21 O/16 B	McNeill Tr	Fv bx	70	84	280	nd	0.5	21	0.8	7	0.6	6
551	21 O/16 B	McNeill Tr	Fv bx	70	70	640	6	0.5	22	1.0	20	0.4	4
552	21 O/16 B	McNeill Tr	Fv bx	25	120	530	nd	0.5	24	0.7	nd	0.7	8
553	21 O/16 B	McNeill Tr	bx	4,500	290	1,200	3	2.5	8	nd	26	72.0	50
554	21 O/16 B	McNeill Tr	Mv	92	120	4,800	1	0.5	42	1.1	96	2.1	5
555	21 O/16 B	McNeill Tr	Mv?	1,400	480	960	1	2.5	110	1.9	88	9.4	10
557	21 O/16 B	McNeill Tr	Mv?	500	1,100	6,700	4	1.0	72	1.3	57	4.3	10
560	21 O/16 B	McNeill Tr	bx	2,300	92	760	nd	0.5	73	3.7	27	5.2	11
597	21 O/9 F	Upper McNair	V	290	1,600	980	12	25.0	110	13.0	44	22.0	42
598	21 O/9 F	Upper McNair	bx	880	1,400	980	3	12.0	59	28.0	7	0.1	4
599	21 O/9 F	Upper McNair	Sed	210	3,800	1,100	2	7.0	42	5.9	7	nd	1
600	21 O/16 A	Lower Jack Burns	Fv bx	5	22	36	1	nd	17	5.4	35	0.3	5
601	21 O/16 A	Lower Jack Burns	Fvt	3	16	55	1	nd	14	1.4	18	0.2	4
602	21 O/16 A	Lower Jack Burns	Fv fb	5	14	84	nd	nd	22	4.5	600	nd	3
603	21 O/16 A	Upper Jack Burns	Fv	8	12	19	nd	nd	15	1.6	7	0.3	5
606	21 O/16 A	Jacquet River	Fvt	7	6	130	nd	nd	12	1.2	11	0.1	6
607	21 O/16 A	Jacquet River	Fv bx	4	6	180	nd	nd	4	0.8	4	0.1	3
608	21 O/16 A	Jacquet River	Fvt	2	10	450	nd	nd	3	0.5	14	0.1	nd
609	21 O/16 A	Jacquet River	Mvt	5	6	150	3	nd	7	0.8	11	0.1	4
610	21 O/16 A	Jacquet River	Mvt?	3	10	160	nd	nd	10	0.6	4	nd	4

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
456	nd	nd	14	44	nd	2	1.30	140	870	2,300	6.10	1.80	1.80	2.00	1.20
460A	nd	1.0	17	26	nd	16	0.53	68	640	640	5.00	3.30	3.10	0.70	1.60
460B	nd	nd	24	27	nd	16	0.57	96	920	690	5.30	2.40	3.80	1.40	2.40
460C	8	2.0	21	35	nd	46	1.40	240	2,100	2,200	6.70	3.90	1.20	5.50	2.10
461	nd	nd	27	26	nd	42	0.67	170	3,700	780	5.30	2.10	0.48	12.00	1.80
462	22	5.0	44	93	nd	48	2.70	380	880	1,800	9.60	2.70	0.44	5.80	3.10
463A	nd	6.0	5	28	nd	4	0.16	34	270	190	3.30	4.60	0.10	0.64	0.30
463B	nd	2.00	7	15	nd	6	0.19	30	290	230	2.90	3.80	0.38	0.63	0.66
465	nd	nd	3	5	nd	2	0.15	16	80	150	1.60	2.70	5.00	0.07	0.11
466	nd	nd	36	35	nd	170	0.58	200	2,400	340	4.30	1.20	5.80	2.60	2.00
469	12	nd	7	27	9	14	0.27	46	1,200	370	3.70	0.07	0.49	1.20	1.10
471	18	nd	130	59	nd	240	0.91	240	1,100	500	7.10	3.00	0.74	10.00	4.30
472	17	nd	3	3	3	6	0.12	4	72	90	0.66	0.08	5.10	0.02	0.03
473	13	nd	3	4	21	8	0.12	6	500	110	0.39	0.14	7.00	3.00	0.12
474	nd	nd	85	45	1	230	0.85	210	3,900	830	7.20	1.20	3.80	6.70	2.40
475	11	nd	2	4	2	6	0.14	4	54	150	2.20	0.21	7.00	0.03	0.06
477	nd	nd	2	6	nd	6	0.16	6	320	80	0.89	0.41	5.40	0.43	0.14
481	nd	nd	12	54	nd	18	1.60	340	1,400	1,600	7.90	3.10	0.37	8.10	3.30
487	nd	nd	2	2	nd	4	0.06	12	52	30	0.76	0.03	0.39	0.03	0.09
489 F	nd	nd	8	37	nd	16	1.10	260	1,400	1,300	7.20	4.20	0.21	5.60	2.00
500	6	nd	35	37	nd	93	0.76	140	430	1,900	5.10	1.90	4.00	0.82	0.88
501	7	nd	43	41	nd	74	0.77	130	1,100	1,600	5.10	2.50	2.30	2.30	1.30
502	10	nd	44	39	1	84	0.81	140	630	1,500	5.20	2.70	2.20	1.50	1.30
503	8	nd	28	26	nd	22	0.25	48	3,200	450	5.30	0.68	1.40	7.50	3.10
505	8	nd	3	8	nd	2	0.26	20	510	260	1.40	1.50	5.10	0.41	0.29
507	9	nd	2	6	nd	2	0.15	10	240	200	1.80	0.99	4.90	0.19	0.16
510	14	nd	12	59	2	10	1.30	190	1,700	2,200	7.80	4.20	1.10	1.20	1.30
512	nd	nd	32	50	nd	110	1.50	260	1,900	1,700	8.50	3.00	0.56	3.40	3.60
521	7	nd	25	32	nd	48	1.10	120	1,500	1,300	5.10	1.70	1.20	4.10	1.30
530	nd	nd	2	5	nd	nd	0.26	16	150	320	1.30	0.80	3.30	0.06	0.22
550	nd	nd	9	28	1	4	0.32	40	1,000	820	6.20	0.19	0.19	0.57	0.47
551	nd	nd	7	18	4	4	0.18	26	290	310	4.60	0.13	6.30	0.05	0.29
552	nd	nd	44	51	2	22	0.84	110	1,300	2,100	6.30	1.30	4.30	1.10	0.83
553	nd	nd	23	69	4	34	0.25	70	1,800	400	20.00	0.05	0.07	0.06	1.1
554	nd	nd	9	50	22	16	0.80	80	2,300	690	14.00	1.00	1.90	0.12	1.20
555	nd	nd	18	21	2	24	0.16	76	500	220	8.50	0.05	0.41	0.05	0.52
557	7	nd	99	64	71	230	0.78	200	4,000	680	11.00	0.59	5.50	0.11	1.70
560	nd	nd	21	27	3	38	0.22	58	1,300	230	5.90	0.07	0.53	1.00	0.76
597	nd	nd	12	43	6	16	0.23	38	3,700	650	9.40	0.09	0.86	0.07	3.30
598	nd	nd	6	9	7	12	0.24	40	740	390	2.00	0.05	2.20	0.08	0.38
599	nd	nd	5	5	7	18	0.077	18	220	120	2.20	0.03	0.34	0.04	0.17
600	nd	nd	3	8	nd	nd	0.19	14	330	230	2.70	1.50	5.40	0.06	0.30
601	nd	nd	4	9	nd	nd	0.18	12	1,200	190	3.40	1.30	4.40	0.99	0.76
602	5	nd	4	5	nd	4	0.087	8	8,000	120	2.00	0.79	3.00	11.00	0.27
603	5	nd	3	4	nd	nd	0.082	6	440	100	1.10	2.20	4.30	0.39	0.11
606	6	nd	37	40	nd	24	0.93	150	1,100	1,400	5.90	4.70	1.20	1.30	0.82
607	6	nd	31	27	nd	24	0.74	130	1,500	1,400	4.90	3.30	0.42	7.40	2.00
608	6	nd	91	49	1	36	0.19	140	200	750	9.00	0.46	0.40	16.00	4.90
609	nd	nd	73	41	nd	150	0.89	180	1,300	2,400	6.30	2.00	1.40	0.63	2.60
610	7	nd	59	33	nd	160	0.93	200	1,100	1,900	5.00	2.30	1.30	0.76	0.83

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
617	21 O/16 A	Jacquet River	Fvt	4	10	150	nd	nd	2	0.5	4	0.2	3
618	21 O/16 A	Jacquet River	Fvt	7	4	170	nd	nd	3	0.7	11	0.2	5
619	21 O/16 A	Jacquet River	Fvt	2	nd	370	nd	nd	8	0.9	7	0.1	nd
620A	21 O/16 A	Little Ramsay	Fv	3	32	110	3	nd	10	3.5	23	0.1	3
620B	21 0/16 A	Little Ramsay	Fv	7	24	140	nd	nd	9	3.0	38	0.1	4
621	21 O/16 A	Big Hole S. Trib	V	1	94	60	14	0.5	20	2.2	28	nd	nd
623	21 O/16 A	Big Hole S. Trib	Fv?	39	80	510	10	2.0	170	2.2	210	0.1	2
624	21 O/16 A	Big Hole S. Trib	Fv?	34	40	230	1	0.5	99	1.6	35	nd	2
625	21 O/16 A	Big Hole S. Trib	Sed?	1	380	950	20	1.0	7	1.6	70	nd	nd
626	21 O/16 A	Big Hole S. Trib	Fv?	11	130	65	nd	0.5	11	2.1	49	nd	3
627A	21 O/16 A	McLean	Fvt	41	150	510	1	1.0	57	1.1	780	1.1	3
627B	21 O/16 A	McLean	Fvt	100	18	53	8	1.0	36	0.6	31	nd	4
628	21 O/16 B	Falls Gulch	Fvt	7	84	340	nd	nd	40	5.9	430	0.1	4
629	21 O/16 B	Falls Gulch	Fvt	7	22	160	nd	nd	21	5.2	110	0.1	4
630	21 O/16 B	Big Ramsay	Mva	6	2	170	5	nd	4	0.4	24	0.1	nd
631	21 O/16 B	Big Ramsay	Mva	40	4	350	2	nd	5	2.2	8	0.2	2
632	21 O/16 B	Big Ramsay	Mvt	49	14	290	1	nd	13	2.9	10	0.2	2
633	21 O/16 B	Big Ramsay	Mva	280	8	360	nd	nd	6	1.5	5	0.3	2
634	21 O/16 B	Pb Gulch	Fvt	31	260	780	9	0.5	27	2.3	210	2.0	3
635	21 O/16 B	N.Trib B. Ramsay	Fv bx	6	18	110	nd	nd	8	0.4	29	nd	9
636	21 O/16 B	N.Trib B. Ramsay	Fvt	290	12	20	nd	nd	16	0.7	10	1.2	13
637	21 O/16 B	N.Trib B. Ramsay	Fv	69	20	28	2	nd	23	1.0	5	0.9	7
638	21 O/16 B	N.Trib B. Ramsay	Fv	89	12	48	12	nd	13	0.5	5	1.0	7
639	21 O/16 B	N.Trib B. Ramsay	Fvt	140	12	110	nd	nd	7	0.5	5	0.6	6
640	21 O/16 B	N.Trib B. Ramsay	Fv	6	16	80	nd	nd	54	0.3	5	3.6	3
641	21 O/16 B	N.Trib B. Ramsay	gossan	9	26	110	1	nd	110	1.2	23	32.0	14
642	21 O/16 B	N.Trib B. Ramsay	gossan	8	18	150	nd	nd	62	0.8	26	21.0	17
643	21 O/16 B	N.Trib B. Ramsay	gossan	52	40	510	4	nd	10	0.4	41	0.1	3
644	21 O/16 B	Wildcat	Fv	5	16	170	nd	nd	12	7.0	37	nd	7
645	21 O/16 B	Wildcat	Mva	11	8	210	nd	nd	15	1.6	230	nd	10
646A	21 O/16 B	Wildcat	Fv	26	32	260	nd	nd	26	4.2	130	nd	9
646B	21 O/16 B	Wildcat	Fv	9	10	200	nd	nd	12	1.8	72	nd	10
647	21 O/16 B	Wildcat	Fv	26	180	200	nd	1.0	33	5.2	81	nd	7
648	21 O/16 B	Wildcat	bx	820	21,000	29,000	15	280	24	2.5	6,370	1.4	9
649	21 O/16 B	Wildcat	Fv	40	300	620	1	3.5	24	2.9	120	nd	7
654	21 O/16 A	Big Hole	Fv	7	2	11	nd	nd	18	11.0	55	0.1	10
661	21 O/16 B	Lower McNair	Mvt	13	10	330	4	nd	10	0.4	17	0.3	2
662	21 O/16 B	Lower McNair	Mvt	5	6	260	10	nd	3	0.7	8	nd	3
663A	21 O/16 B	McNeill S. Trib.	Fv	20	620	1,600	1	nd	9	1.7	220	nd	3
663B	21 O/16 B	McNeill S. Trib.	Mv	43	48	880	2	nd	15	1.4	83	nd	6
663C	21 O/16 B	McNeill S. Trib.	Fv?	81	350	1,900	1	nd	27	2.7	600	0.1	2
663D	21 O/16 B	McNeill S. Trib.	Mv?	660	520	2,300	2	nd	71	14.0	880	6.2	6
663E	21 O/16 B	McNeill S. Trib.	Fv?	27	58	670	2	nd	43	3.2	220	nd	3
663 F	21 O/16 B	McNeill S. Trib.	Fv	10	24	450	140	nd	8	1.6	69	nd	3
664A	21 O/16 B	McNeill S. Trib.	Fv	22	680	3,700	9	nd	27	1.9	170	nd	3
664B	21 O/16 B	McNeill S. Trib.	Fv	59	1,400	3,900	2	nd	11	1.7	340	nd	4
664C	21 O/16 B	McNeill S. Trib.	Fv	13	700	2,000	2	nd	36	1.6	67	nd	4
665	21 O/16 B	McNeill	Fvt	46	520	860	39	nd	32	1.8	200	0.1	5
666	21 O/16 B	McNeill	Mvt	41	50	370	1	nd	6	1.4	30	nd	4
667	21 0/16 B	McNeill	Fv	5	30	150	2	nd	14	1.1	15	0.2	4

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
617	6	nd	5	5	nd	6	0.13	6	1,800	130	4.30	0.35	1.50	0.51	1.80
618	6	nd	5	11	nd	4	0.39	32	970	340	4.30	1.10	2.50	0.42	0.54
619	6	nd	66	43	1	14	0.31	150	2,500	450	7.40	0.24	0.44	11.00	1.70
620A	nd	nd	3	6	1	nd	0.13	6	250	140	2.10	0.10	6.20	0.07	0.17
620B	nd	nd	9	6	nd	2	0.12	6	140	100	1.80	0.08	4.80	0.07	0.19
621	15	nd	2	2	nd	6	0.007	2	3,600	40	1.20	0.14	0.33	27.00	0.23
623	15	nd	31	38	3	96	0.95	100	2,500	730	6.10	1.90	5.00	6.50	0.68
624	18	nd	72	55	nd	120	1.20	210	1,900	930	7.40	2.60	3.80	4.00	1.40
625	17	nd	6	5	4	6	0.012	6	8,600	50	7.10	0.13	0.09	20.00	4.20
626	6	nd	2	7	nd	2	0.20	4	380	190	2.90	0.15	7.80	0.07	0.32
627A	nd	nd	4	6	3	nd	0.13	12	320	140	2.90	2.20	3.10	0.64	0.46
627B	nd	0.3	5	6	nd	4	0.16	10	200	130	2.20	3.10	2.60	0.63	0.41
628	nd	nd	2	7	2	13	0.25	36	26	120	1.50	0.22	5.60	0.03	0.07
629	nd	nd	1	4	nd	7	0.16	14	84	150	1.90	0.07	4.30	0.03	0.12
630	11	nd	63	34	nd	48	0.43	140	2,300	560	5.80	1.20	0.80	8.00	1.90
631	7	nd	100	35	nd	160	0.84	150	1,800	880	9.70	2.60	0.78	2.30	2.50
632	nd	nd	110	46	nd	220	0.71	190	1,700	570	6.90	2.30	0.94	8.60	1.70
633	nd	nd	130	49	nd	290	0.86	180	2,000	640	8.70	3.70	0.67	5.60	2.90
634	nd	nd	13	26	nd	26	0.99	100	1,100	2,200	8.30	2.80	6.00	1.10	0.21
635	nd	0.3	8	10	nd	8	0.34	58	1,600	280	3.90	1.60	3.50	0.06	0.15
636	nd	0.7	3	7	nd	nd	0.16	8	70	180	2.80	0.19	6.00	0.05	0.23
637	nd	0.1	3	9	nd	nd	0.20	6	160	180	2.40	0.19	6.50	0.04	0.37
638	nd	nd	3	8	nd	4	0.22	12	200	220	2.10	0.17	7.00	0.04	0.41
639	nd	0.5	4	18	nd	nd	0.19	20	500	200	4.20	0.23	6.20	0.06	1.20
640	nd	0.7	27	33	nd	6	0.77	130	700	890	4.00	3.60	0.91	1.80	0.88
641	nd	6.7	6	17	nd	16	0.37	98	650	470	9.00	0.75	0.10	0.07	1.80
642	nd	2.0	10	23	nd	18	0.48	110	1,000	690	8.30	1.30	0.10	0.08	2.80
643	nd	0.6	8	29	1	18	0.29	86	1,800	320	9.90	0.22	0.13	0.08	3.90
644	5	nd	5	11	nd	4	0.27	18	1,400	370	3.60	0.08	8.90	0.10	0.14
645	nd	nd	10	45	1	4	0.93	180	570	1,000	6.60	1.40	6.10	1.60	1.50
646A	nd	nd	8	31	nd	6	0.71	130	2,500	800	4.50	0.15	5.60	6.50	0.90
646B	10	nd	8	34	nd	8	0.81	170	1,300	940	5.20	0.68	5.10	3.50	0.38
647	3	nd	4	15	1	nd	0.41	32	480	650	3.00	0.15	9.60	0.08	0.04
648	16	nd	12	50	86	12	0.85	210	3,500	700	6.10	0.83	4.90	2.80	2.60
649	nd	nd	3	11	2	2	0.31	34	660	450	2.70	0.14	10.00	0.08	0.11
654	nd	nd	15	8	nd	2	0.006	nd	240	90	2.30	0.004	0.002	1.40	0.004
661	5	nd	33	36	1	54	0.71	150	1,700	540	8.30	1.40	1.40	0.36	2.20
662	nd	nd	37	36	1	48	0.96	480	1,300	1,100	7.30	3.60	2.40	0.60	1.30
663A	nd	nd	17	33	10	56	0.83	400	3,600	890	6.20	3.40	3.30	2.50	1.30
663B	nd	nd	14	48	4	14	1.30	320	4,700	1,300	9.40	0.55	6.10	1.30	1.60
663C	nd	nd	13	21	12	26	0.52	58	3,500	650	5.90	0.16	5.20	2.60	0.79
663D	5	nd	11	27	15	38	0.64	100	1,300	390	4.90	1.40	0.28	0.54	0.81
663E	nd	nd	15	34	7	8	1.10	180	3,700	1,100	8.80	1.80	3.50	1.00	0.65
663 F	7	nd	20	30	2	54	0.84	260	4,400	790	6.40	1.60	5.30	4.60	1.60
664A	nd	nd	22	43	13	50	0.81	110	4,500	870	7.20	3.30	2.40	2.70	1.10
664B	nd	nd	20	46	29	50	0.97	130	5,000	920	7.20	2.30	3.40	3.80	1.00
664C	nd	nd	23	62	6	64	0.89	92	4,000	920	7.90	4.00	1.20	2.00	1.20
665	nd	nd	23	29	3	36	0.68	96	1,800	1,300	6.30	0.15	6.50	0.54	0.63
666	nd	nd	58	35	nd	98	0.76	140	3,400	660	6.00	0.35	5.90	2.00	1.30
667	nd	nd	4	14	nd	nd	0.50	26	850	620	6.00	0.38	7.00	0.29	0.13

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
668	21 0/16 B	McNeill	Fv	18	14	400	10	nd	26	1.1	15	nd	6
669	21 O/16 B	McNeill	Mva	160	220	150	19	nd	170	3.1	89	nd	4
670	21 O/16 B	Lower McNair	Mvt	44	14	250	4	nd	70	0.9	67	nd	6
671	21 O/16 B	Lower McNair	Mva	22	28	200	20	0.5	46	0.9	47	nd	10
672	21 0/16 B	Lower McNair	Mv	49	26	210	9	nd	41	0.4	37	0.2	16
672A	21 O/16 B	Lower McNair	Mvt	6,400	16	250	20	0.5	15	0.4	13	0.7	7
673	21 O/16 B	Little McLean	Fvt	17	2	110	5	nd	20	1.2	630	nd	4
674	21 0/16 B	Little McLean	Sed	55	16	130	nd	nd	7	1.0	41	0.3	4
675	21 0/16 B	Little McLean	Fvt	11	12	63	nd	1.5	190	12.0	250	0.2	4
676	21 O/16 B	Little McLean	Fvt	16	18	130	nd	nd	47	12.0	180	0.5	8
677	21 O/16 B	Little Mclean	Fvt	8	4	81	1	nd	43	9.1	110	0.9	4
678	21 O/16 B	Little McLean	Fvt	7	6	89	nd	nd	31	8.7	55	nd	3
679A	21 O/16 B	Wildcat	Fv	100	820	1,300	4	4.5	110	3.1	430	nd	3
679B	21 O/16 B	Wildcat	Fv bx	160	680	550	2	12.0	110	3.3	570	nd	3
680	21 O/16 B	McNeill	Mv	2,100	48	250	5	0.5	90	1.5	49	12.0	100
681	21 O/16 B	McNeill	Mvt	140	26	330	nd	nd	33	0.6	51	6.0	3
682	21 O/16 B	McNeill	Mva	25	38	370	nd	nd	34	0.6	34	2.7	10
683	21 O/16 B	McNeill N. Trib.	Mv	27	28	260	nd	nd	10	0.9	nd	nd	4
684	21 O/16 B	McNeill N. Trib.	bx	200	280	8,700	13	nd	220	3.6	600	5.0	43
685	21 O/16 B	Wildcat Tr#2	Fvt	64	130	350	nd	nd	12	2.5	5	nd	2
686	21 O/16 B	Wildcat Tr#1	Fv fb	6	250	820	nd	nd	4	0.9	7	nd	2
687	21 O/16 B	Hayes Gulch	Fv	51	280	1,100	nd	nd	46	2.8	92	0.1	3
688	21 O/16 B	Hayes Gulch	Fvt	45	310	320	2	4.5	390	14.0	390	0.1	9
689	21 O/16 B	Hayes Gulch	Fv	33	520	2,200	nd	nd	8	1.0	33	0.1	4
690	21 O/16 B	Hayes Gulch	Fv	41	2,000	5,100	nd	nd	5	0.8	65	0.1	3
691A	21 O/16 B	Hayes Gulch	Fvt	14	380	690	32	nd	9	1.6	44	0.2	2
691B	21 O/16 B	Hayes Gulch	Fvt	18	340	740	nd	nd	19	1.5	110	0.3	5
692	21 O/16 B	Hayes Gulch	Fv	85	52	460	nd	nd	21	0.8	nd	0.1	4
693	21 O/16 B	Hayes Gulch	Fv bx	54	100	1,900	nd	nd	22	1.5	14	0.7	10
694	21 O/16 B	Hayes Gulch	Fv bx	55	380	890	nd	nd	63	8.6	14	0.1	4
695	21 O/16 B	Wildcat	Fvt	12	38	350	nd	1.0	16	3.1	58	nd	6
696	21 O/16 B	Wildcat	Fv	24	82	490	nd	1.0	31	5.2	58	nd	10
700	21 O/9 F	Sormony Road	t	36	nd	57	nd	nd	12	0.3	6	1.1	9
702	21 O/9 F	Rocky Brook	Fvt	18	6	56	1	nd	5	3.9	nd	0.8	5
704	21 O/9 E	Jacquet R. Lakes	Mva	43	nd	90	nd	nd	12	nd	nd	nd	6
705	21 O/9 E	Jacquet R. Lakes	Sed	140	2	97	nd	nd	6	1.0	nd	0.2	4
721	21 O/10 H	N.B.I.P. Road	Sed	6	4	77	nd	nd	8	0.2	14	nd	1
723	21 0/10 G	Jerry Ferguson	Sed?	10	34	26	nd	nd	11	1.4	6	0.3	4
724	21 O/10 H	N.B.I.P. Road	Mv	43	6	89	nd	nd	1	nd	nd	nd	4
725	21 O/10 H	N.B.I.P. Road	Fvt	2	14	76	9	nd	9	2.9	55	nd	3
726	21 O/10 B	Jerry Ferguson	Mv	6	20	44	nd	nd	7	1.8	nd	0.2	4
728	21 O/10 B	Jerry Ferguson	Mv bx	26	8	78	nd	nd	4	0.4	14	nd	3
729	21 O/10 B	Jerry Ferguson	Mv	22	6	71	nd	nd	9	nd	nd	nd	5
732	21 0/10 B	Six Mile	Fv	7	86	230	nd	0.5	7	1.8	40	nd	32
733	21 O/10 C	Jerry Ferguson	Mv bx	88	24	110	26	0.5	5	4.1	13	0.2	6
734A	21 O/10 C	Jerry Ferguson	Sed	83	22	120	nd	0.5	7	0.8	37	nd	1
734B	21 O/10 C	Jerry Ferguson	Sed	28	16	100	nd	0.5	7	0.6	38	nd	2
744	21 O/9 F	Rocky Gulch	Sed	53	12	140	20	0.5	6	0.5	10	0.3	7
745	21 0/9 F	Rocky Gulch	Sed	34	32	720	17	nd	6	16.0	220	0.2	4
747	21 O/10 G	Jerry Ferguson	Fvt	65	28	72	nd	nd	42	1.2	23	nd	8

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
668	nd	nd	13	56	nd	10	1.90	430	2,300	1,300	7.80	1.40	5.50	1.40	1.50
669	nd	nd	7	28	nd	nd	1.20	60	2,000	2,600	6.80	4.30	0.56	0.89	1.10
670	15	nd	12	45	nd	12	1.60	380	1,100	1,800	8.70	4.50	0.39	0.81	0.86
671	nd	nd	9	46	nd	12	1.50	250	980	2,000	7.80	4.50	0.64	0.18	0.63
672	6	nd	10	25	nd	26	1.20	110	750	2,200	7.50	2.60	2.30	0.48	0.81
672A	nd	nd	23	55	nd	76	1.30	250	1,400	1,200	7.30	3.40	4.70	0.13	1.60
673	8	nd	9	13	nd	12	0.48	36	440	760	3.60	6.40	0.45	1.90	0.97
674	5	nd	91	35	nd	110	0.49	140	840	590	6.20	0.77	3.70	1.10	2.30
675	nd	nd	5	7	nd	4	0.16	6	230	110	2.80	1.60	5.60	0.03	0.12
676	nd	nd	6	6	nd	8	0.16	4	1,100	170	4.10	0.76	7.10	0.04	0.09
677	8	nd	3	6	nd	nd	0.15	6	590	130	3.50	0.96	6.50	0.04	0.08
678	nd	nd	3	5	nd	nd	0.15	6	290	90	2.80	1.00	6.00	0.04	0.12
679A	nd	nd	3	8	13	10	0.39	38	180	690	2.60	0.15	9.40	0.03	nd
679B	nd	nd	3	8	2	6	0.34	30	130	680	2.60	0.16	9.50	0.06	0.02
680	5	nd	13	48	nd	30	0.43	120	1,500	320	9.60	0.73	0.02	0.45	1.30
681	nd	nd	29	61	nd	40	0.77	160	2,700	1,100	9.60	1.10	4.50	0.82	2.10
682	5	nd	23	44	nd	36	0.68	150	2,200	1,000	10.00	1.70	2.60	0.82	2.00
683	7	nd	31	40	nd	44	0.86	170	2,600	1,100	6.70	1.60	5.20	2.40	2.50
684	6	nd	14	42	43	22	0.48	120	2,700	640	10.00	0.64	2.60	0.79	1.50
685	nd	nd	3	5	1	6	0.13	18	680	140	3.00	0.11	6.90	0.04	0.09
686	nd	nd	3	7	4	6	0.16	12	1,500	150	3.70	0.13	7.60	0.04	0.10
687	nd	nd	16	50	4	36	1.40	350	5,200	1,300	7.40	2.60	3.60	2.80	0.77
688	nd	nd	7	20	4	8	0.58	86	90	770	2.90	0.12	5.90	0.04	0.07
689	6	nd	15	38	8	26	0.76	66	3,000	2,000	7.20	1.90	5.30	1.20	0.73
690	nd	nd	9	30	21	14	0.64	60	2,400	1,600	6.30	2.60	2.60	2.10	0.82
691A	nd	nd	6	21	1	16	0.62	54	860	1,300	6.20	0.18	5.30	1.10	0.76
691B	nd	nd	6	22	3	22	0.69	62	530	1,600	5.40	0.15	6.80	1.20	0.61
692	nd	nd	4	24	1	8	0.65	48	1,600	1,400	5.60	2.20	4.30	1.50	0.80
693	nd	nd	5	30	8	8	0.61	48	2,700	1,300	6.40	1.10	4.70	1.40	0.80
694	6	nd	4	18	4	6	0.66	56	2,700	1,200	4.60	1.30	3.40	1.60	0.56
695	4	nd	6	25	nd	4	0.45	60	730	380	3.20	0.08	5.20	0.08	0.12
696	nd	nd	11	47	1	14	0.95	270	1,400	980	4.90	0.17	8.80	0.18	0.24
700	nd	nd	26	39	nd	40	1.00	200	630	1,400	6.30	5.00	0.48	2.20	2.40
702	7	nd	4	7	nd	4	0.18	36	240	200	1.90	0.45	7.00	0.04	0.12
704	6	nd	90	41	nd	140	0.66	170	1,400	1,100	5.80	5.00	0.18	4.10	3.20
705	nd	nd	110	31	nd	120	0.49	130	1,200	630	5.70	4.10	2.80	3.50	2.80
724	nd	nd	33	12	nd	22	0.11	38	3,500	170	6.00	0.33	0.65	24.00	1.40
723	nd	nd	11	9	nd	16	0.24	22	910	400	1.50	3.00	3.90	1.30	0.18
724	nd	nd	66	38	nd	110	0.56	160	770	940	5.80	2.30	0.81	5.30	3.40
725	nd	nd	5	5	nd	4	0.088	8	170	80	1.30	0.22	4.40	0.22	0.23
726	nd	nd	6	5	nd	2	0.11	6	380	150	1.70	2.60	3.30	0.08	0.30
728	7	nd	49	21	nd	78	0.35	68	730	540	3.50	2.00	1.20	1.00	1.20
729	nd	nd	61	34	nd	92	0.58	170	560	1,300	6.80	2.20	0.04	10.00	1.90
732	nd	nd	3	6	1	42	0.31	8	390	140	1.90	0.08	1.50	0.05	0.16
733	nd	nd	53	30	nd	88	0.66	140	620	1,000	3.80	2.60	1.00	4.80	0.64
734A	nd	nd	62	21	nd	120	0.38	52	1,300	230	5.00	0.91	0.82	5.60	1.20
734B	nd	nd	48	19	1	160	0.54	78	570	290	3.40	1.70	1.10	1.40	0.71
744	nd	nd	59	42	nd	110	0.94	200	1,300	1,200	6.70	2.20	1.80	2.90	2.50
745	nd	nd	71	32	5	60	0.30	68	1,400	460	6.10	0.13	1.30	13.00	1.40
747	nd	nd	55	31	nd	110	0.48	160	380	600	8.90	5.20	0.10	2.50	1.80

Geochemical Data - All Samples (numerically)

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
750B	21 O/9 F	Sormony Road	Mva	43	8	84	2	nd	52	2.0	29	nd	5
756	21 O/9 E	Jacquet R. Lakes	Mva	23	nd	140	nd	nd	9	0.8	14	nd	6
757A	21 O/9 E	Jacquet R. Lakes	Sed	29	6	73	nd	nd	75	0.4	6	nd	7
758	21 O/9 E	Jacquet R. Lakes	MI?	4	4	28	nd	nd	2	nd	35	nd	2
759	21 O/9 E	Jacquet R. Lakes	MI?	18	8	25	nd	nd	11	0.3	20	nd	3
800	21 O/10 H	9 Mile Bk. Road	Mv?	29	24	97	19	0.5	18	0.6	20	0.2	6
801	21 O/10 H	9 Mile Bk. Road	MI?	61	12	170	nd	nd	15	3.1	90	0.1	6
804	21 O/10 A	Meadow Brook	Mv	40	8	97	nd	nd	4	0.9	12	nd	4
805	21 O/10 B	Six Mile	Fv?	5	6	36	17	nd	1	0.6	13	0.1	3
807	21 O/10 B	Six Mile	Fvt	3	16	120	nd	nd	11	5.2	59	0.1	5
888	21 O/9 F	Rocky Brook	Fv	32	120	160	7	30.0	100	100	40	nd	3
889	21 O/10 H	9 Mile Bk. Road	MI?	28	38	76	nd	1.0	95	3.7	26	nd	5
890	21 O/10 H	9 Mile Bk. Road	MI?	14	34	100	nd	1.0	35	4.5	67	nd	4
892	21 O/10 A	Meadow Brook	Sed	3	2	58	nd	1.5	12	5.9	nd	0.2	3
893	21 O/10 H	9 Mile Bk. Road	Mva	34	14	84	nd	1.5	19	21.0	nd	0.3	5
894	21 O/10 H	9 Mile Bk. Road	MI	68	4	84	nd	1.5	10	1.5	nd	nd	3
895A	21 O/10 H	9 Mile Bk. Road	V	750	50	56	16	2.5	320	23.0	520	4.6	4
895B	21 O/10 H	9 Mile Bk. Road	V	5,400	190	550	420	9.0	540	39.0	900	41.0	9
896	21 O/10 H	9 Mile Bk. Road	V	1,700	240	220	630	14.0	30	17.0	980	258	6
897	21 O/10 H	9 Mile Bk. Road	MI	32	28	170	6	nd	27	4.2	300	5.5	5
898	21 O/10 H	9 Mile Bk. Road	V	83,000	3,800	470	1,200	200	95	28.0	6,530	723	4
899	21 O/10 H	9 Mile Bk. Road	MI	230	22	91	nd	nd	27	7.7	370	2.2	5

Geochemical Data - All Samples (numerically)

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
750B	nd	nd	88	39	nd	210	0.91	260	660	810	7.70	3.60	1.70	1.50	1.80
755	nd	nd	15	44	nd	34	1.20	170	1,400	2,900	8.20	2.50	1.40	3.40	2.10
757A	5	nd	59	27	nd	86	0.49	110	370	760	6.90	1.90	1.40	1.40	3.30
758	nd	nd	34	11	nd	76	0.25	24	280	470	1.90	1.70	1.20	0.23	0.17
759	nd	nd	31	10	nd	46	0.20	34	500	360	3.20	2.20	1.60	0.22	0.14
800	nd	nd	11	22	nd	6	0.60	96	580	1,000	3.50	0.63	0.16	5.70	0.49
801	nd	nd	22	30	nd	20	0.70	130	1,300	1,100	5.80	2.20	2.30	0.44	0.41
804	6	nd	81	54	nd	190	1.20	240	1,100	1,300	7.40	2.70	0.39	5.10	5.00
805	nd	nd	4	4	nd	12	0.17	18	410	210	0.78	4.30	0.90	0.07	0.15
807	nd	nd	25	26	nd	92	0.85	150	1,000	670	5.20	0.23	1.60	0.23	0.31
888	nd	nd	21	11	1	140	0.43	130	160	250	2.40	0.08	3.00	0.13	0.63
889	nd	nd	12	17	nd	74	0.51	72	700	320	3.20	2.10	1.60	2.50	0.79
890	7	nd	13	16	1	78	0.51	82	1,100	350	3.70	2.10	1.90	3.00	0.78
892	9	nd	18	28	nd	74	0.97	150	980	1,000	4.20	3.70	0.79	7.80	2.60
893	7	nd	28	32	nd	32	0.69	120	830	1,500	5.00	0.14	0.32	1.00	0.17
894	nd	nd	67	39	nd	130	0.56	150	1,000	880	5.40	3.80	1.20	4.50	3.60
895A	8	nd	11	25	nd	20	0.19	60	3,800	370	2.80	0.17	1.10	15.00	0.26
895B	nd	nd	21	53	3	8	0.08	42	2,500	210	6.60	0.15	0.52	8.40	0.28
896	nd	nd	11	15	nd	8	0.26	52	1,200	500	5.20	0.07	1.40	1.00	0.33
897	9	nd	12	20	nd	12	0.39	70	1,400	750	4.70	0.55	2.90	2.30	0.74
898	10	nd	8	25	3	nd	0.02	38	610	640	18.00	0.05	0.37	0.61	0.18
899	6	nd	15	27	1	14	0.78	130	2,500	1,700	4.20	1.60	1.80	2.80	0.78

APPENDIX B

Geochemical Data - All Drill Core Samples

List of Rock Type Abbreviations

F = felsic	bx = breccia	a = amygdaloidal
M = mafic	v = volcanic	fb = flow-banded
SED = sediment		p = porphyritic
V = vein		t = tuffaceous
I = intrusion		

nd = not detected

NA = not analysed

Rock types are classified on the basis of field note descriptions. The terms "felsic" and "mafic" refer to light and dark colouration and do not necessarily imply acidic or basic compositions. Rocks of uncertain affinities are designated by a question mark.

Geochemical Data - All Drill Core Samples

Sample No.	Drill Hole	From (m)	To (m)	Width (m)	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
DC-1	MD-1	99.39	102.42	3.03	Fv	24	58	240	nd	nd	130	0.8	48	0.6	NA
DC-2	MD-1	102.42	104.24	1.82	Fv	34	320	280	nd	1.0	24	2.4	45	0.1	NA
DC-3	MD-2	17.27	20.30	3.03	Fv	5	4	71	nd	nd	4.9	0.1	45	0.1	NA
DC-4	MD-2	20.30	23.33	3.03	Fv	3	nd	81	nd	nd	4.4	0.1	19	0.1	NA
DC-5	MD-2	23.33	26.36	3.03	Mv	4	2	100	nd	nd	2.8	0.1	13	0.2	NA
DC-6	MD-2	26.36	29.39	3.03	Fv	8	12	90	nd	nd	5.2	0.1	16	0.1	NA
DC-7	MD-2	39.70	42.73	3.03	gouge	9	2	75	nd	nd	4.0	0.1	32	0.2	NA
DC-8	MD-2	42.73	45.76	3.03	gouge	46	14	91	nd	nd	10.0	0.1	35	nd	NA
DC-9	MD-2	45.76	48.79	3.03	gouge	2	nd	77	nd	nd	2.8	0.1	22	0.2	NA
DC-10	MD-2	48.79	51.82	3.03	gouge	1	nd	73	nd	nd	2.6	nd	21	0.2	NA
DC-11	MD-2	51.82	54.85	3.03	gouge	1	nd	53	nd	nd	1.8	nd	13	nd	NA
DC-12	MD-2	54.85	57.88	3.03	gouge	11	nd	47	1	nd	2.0	0.1	19	0.2	NA
DC-13	MD-2	62.12	66.67	4.55	Fv	8	16	31	nd	nd	3.4	0.1	16	0.3	NA
DC-14	MD-2	66.67	69.70	3.03	Fv	3	8	15	nd	nd	4.6	0.1	13	nd	NA
DC-52	MD-2	70.53	71.34	0.81	Fv	6	18	34	nd	nd	8	1.0	nd	0.2	4
DC-53	MD-2	72.12	73.03	0.91	Fv	5	20	76	7	2.0	12	1.0	18	0.1	6
DC-15	MD-2	73.03	76.06	3.03	Fv	9	4	230	nd	2.0	44	0.4	26	0.2	NA
DC-16	MD-2	76.06	79.09	3.03	Fv	4	nd	50	nd	1.5	7.9	0.1	13	nd	NA
DC-54	MD-2	79.34	79.75	0.40	Fv	3	28	67	3	0.5	9	0.8	nd	0.1	5
DC-55	MD-2	80.30	80.98	0.68	Fv bx	4	16	56	5	nd	8	0.8	nd	0.1	5
DC-56	MD-2	81.72	82.52	0.80	Fv	4	24	39	nd	nd	8	0.7	6	0.1	5
DC-57	MD-2	83.18	83.58	0.40	Fv bx	3	14	44	20	nd	9	0.7	6	0.1	6
DC-58	MD-2	84.92	85.52	0.60	Fv bx	3	14	41	4	nd	8	0.9	nd	0.2	5
DC-59	MD-2	87.58	88.66	1.08	Mv	6	18	200	4	0.5	50	1.9	6	0.1	7
DC-60	MD-2	89.70	90.00	0.30	Mv	8	20	170	2	1.0	71	1.4	12	0.2	7
DC-61	MD-2	90.30	90.83	0.53	Mv	10	36	150	1	1.5	52	1.2	28	0.1	8
DC-62	MD-2	90.83	91.21	0.38	Mv	12	12	64	2	nd	15	0.7	nd	0.2	4
DC-63	MD-2	91.21	92.73	1.52	Mv	11	18	200	nd	1.5	27	1.5	12	0.1	6
DC-64	MD-2	93.84	94.14	0.30	Mv	30	20	220	1	1.0	24	1.1	6	0.1	6
DC-65	MD-2	94.55	95.76	1.21	Mv	35	40	160	8	1.5	72	1.3	12	0.1	6
DC-66	MD-2	95.76	96.36	0.60	Fv	4	18	41	nd	0.5	14	0.9	6	0.2	5
DC-67	MD-2	103.64	104.24	0.60	Fv	4	180	61	2	nd	8	3.4	15	0.1	3
DC-68	MD-2	104.24	104.54	0.30	Fv	4	160	70	nd	nd	7	4.7	11	0.2	4
DC-69	MD-2	105.15	105.63	0.48	Fv	4	20	140	1	3.5	19	1.6	11	0.2	3
DC-70	MD-2	106.19	106.36	0.17	Mv	6	8	100	nd	0.5	3	0.6	nd	0.1	3
DC-71	MD-2	106.46	106.97	0.51	Mv	18	14	150	2	1.0	11	1.0	15	0.2	4
DC-72	MD-2	106.97	107.58	0.61	Fv	6	20	83	nd	nd	8	3.7	15	0.5	3
DC-73	MD-2	108.79	109.09	0.30	Fv	20	32	150	2	4.0	7	1.2	26	0.2	5
DC-74	MD-2	109.70	110.00	0.30	Fv	7	20	110	nd	1.0	6	1.5	15	0.2	5
DC-75	MD-2	117.27	117.88	0.61	Mvp	73	26	110	nd	5.0	5	1.2	11	0.3	5
DC-76	MD-2	122.37	122.85	0.48	Mvp	42	14	140	2	0.5	7	0.9	8	0.1	6
DC-77	MD-2	126.06	126.67	0.61	Mvp	34	16	130	1	3.5	12	1.3	15	0.2	6
DC-78	MD-2	127.88	128.08	0.20	Sed	55	14	140	1	nd	8	1.3	41	0.3	6
DC-79	MD-2	128.49	129.70	1.21	Mv	13	16	140	13	0.5	24	1.2	11	0.2	6

Geochemical Data - All Drill Core Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
DC-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-52	5	nd	20	10	nd	4	0.18	NA	430	280	2.20	1.10	5.00	0.86	0.48
DC-53	nd	nd	16	17	nd	24	0.37	NA	1,000	480	3.40	0.63	4.20	1.50	0.98
DC-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-54	nd	nd	8	11	nd	nd	0.18	NA	3,000	270	3.60	1.10	4.10	5.40	2.40
DC-55	7	nd	8	11	nd	4	0.19	NA	1,600	290	2.70	0.69	4.50	3.50	1.00
DC-56	5	nd	4	9	nd	nd	0.20	NA	1,100	290	2.10	1.30	5.20	1.90	0.73
DC-57	6	nd	4	9	nd	nd	0.21	NA	440	300	2.00	0.71	5.20	0.96	0.51
DC-58	nd	1	4	8	nd	nd	0.19	NA	840	260	2.10	0.98	4.60	1.60	0.70
DC-59	nd	nd	10	48	nd	12	0.76	NA	1,500	1,700	8.10	1.50	1.70	4.60	1.80
DC-60	7	nd	11	47	nd	nd	0.72	NA	2,700	1,600	8.80	1.70	1.40	5.30	2.70
DC-61	11	1	9	44	nd	8	0.97	NA	1,100	2,000	8.20	3.60	1.30	2.40	1.00
DC-62	10	1	6	13	nd	nd	0.20	NA	1,200	280	3.10	1.40	4.50	3.10	1.10
DC-63	nd	1	12	50	nd	4	0.95	NA	1,300	1,700	8.10	2.40	1.50	2.40	1.40
DC-64	11	nd	11	57	nd	4	0.99	NA	1,500	1,500	8.40	2.40	1.40	3.30	1.50
DC-65	11	1	13	44	nd	10	0.99	NA	1,000	1,700	7.70	3.30	1.40	2.00	1.10
DC-66	12	nd	6	9	nd	nd	0.21	NA	810	310	2.30	2.50	3.40	1.70	0.50
DC-67	nd	nd	4	3	nd	4	0.043	NA	340	40	2.00	0.92	3.80	0.58	0.47
DC-68	nd	1	4	7	nd	nd	0.14	NA	510	260	2.30	0.58	4.20	0.83	0.72
DC-69	nd	1	15	18	nd	8	0.31	NA	1,500	820	4.80	1.70	2.70	4.00	1.40
DC-70	8	1	28	22	nd	36	0.31	NA	1,300	630	4.20	0.97	1.30	2.80	1.50
DC-71	nd	1	26	31	nd	40	0.51	NA	1,900	1,500	5.80	1.90	1.80	4.80	2.30
DC-72	7	1	8	12	nd	12	0.25	NA	1,000	710	2.80	0.61	3.30	2.00	1.10
DC-73	5	1	34	37	nd	40	0.59	NA	1,100	1,600	6.10	1.80	2.80	2.80	1.60
DC-74	nd	nd	17	23	nd	22	0.48	NA	810	1,200	4.60	1.10	3.50	1.80	1.30
DC-75	8	1	37	36	nd	56	0.62	NA	780	1,700	5.60	3.60	1.50	2.90	1.40
DC-76	9	nd	30	52	nd	48	0.88	NA	1,700	1,400	7.10	3.10	1.60	4.80	2.10
DC-77	8	nd	24	47	nd	30	0.96	NA	820	1,600	6.90	2.70	1.60	3.00	1.20
DC-78	11	1	27	36	nd	38	0.54	NA	1,300	1,200	5.90	1.70	1.70	3.60	1.60
DC-79	12	nd	23	50	nd	28	0.93	NA	890	1,600	7.30	2.80	1.50	3.40	1.50

Geochemical Data - All Drill Core Samples

Sample No.	Drill Hole	From (m)	To (m)	Width (m)	Rock Type	Cu	Pb	Zn	Au (ppb)	Ag	As	Sb	Hg (ppb)	Bi	Mo
DC-41	MB-84-1	72.80	74.80	2.00	Mv bx	1,300	1,000	3,600	6	nd	23	1.0	300	2.0	3
DC-42	MB-84-1	78.30	79.04	0.74	Mv	1,100	110	460	5	nd	28	0.9	52	4.0	20
DC-43	MB-84-1	79.04	79.95	0.91	Sed	1,100	140	1,300	5	1.0	46	1.3	120	6.0	8
DC-44	MB-84-1	79.95	80.11	0.16	V	800	200	1,400	3	1.0	64	1.0	130	6.0	6
DC-45	MB-84-1	82.97	83.80	0.83	Mva	270	3,500	5,700	4	nd	50	1.3	69	nd	2
DC-46	MB-84-1	84.80	85.80	1.00	Mva	420	6,400	20,000	4	nd	25	1.0	100	nd	2
DC-47	MB-84-1	86.80	87.80	1.00	Mvt	320	180	940	5	0.5	78	1.7	100	12.0	15
DC-34	MB-84-2	53.95	54.32	0.37	Fv	4	8	96	3	nd	20	0.2	49	nd	2
DC-36	MB-84-2	86.15	87.09	0.94	Fv	4	10	89	3	nd	11	0.4	55	nd	2
DC-37	MB-84-2	124.05	124.58	0.53	Mvt	2,000	160	360	5	nd	33	1.6	58	3.0	20
DC-39	MB-84-2	158.43	159.30	0.87	Mv	190	1,900	7,100	2	1.5	11	0.5	72	3.0	5
DC-17	MB-84-3	4.38	4.69	0.31	Fv	4	290	650	8	0.5	130	1.4	20	nd	2
DC-18	MB-84-3	8.75	9.74	0.99	Fv	13	150	690	6	0.5	110	0.6	17	nd	2
DC-19	MB-84-3	13.27	14.23	0.96	Mv	14	94	680	5	nd	50	1.1	28	nd	2
DC-20	MB-84-3	14.23	15.29	1.06	Mv	55	220	670	4	0.5	37	1.2	6	nd	2
DC-21	MB-84-3	15.29	16.48	1.19	Mv	44	550	1,300	3	nd	31	1.3	20	nd	2
DC-26	MB-84-3	59.05	60.05	1.00	Fv fb	6	14	130	4	nd	20	0.8	12	nd	2
DC-27	MB-84-3	61.58	62.58	1.00	Fv fb	8	82	140	4	nd	30	0.7	6	nd	2
DC-28	MB-84-3	69.00	70.00	1.00	Fv fb	10	24	130	nd	nd	22	1.0	26	nd	4
DC-32	MB-84-3	124.37	125.26	0.89	Mv	210	14	260	2	nd	10	0.6	6	nd	4
DC-33	MB-84-3	125.26	125.93	0.67	Mv	220	14	270	6	nd	13	0.6	17	nd	5

Geochemical Data - All Drill Core Samples

Sample No.	Se	Te	Ni	Co	Cd	Cr	Ti (%)	V	Mn	P	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
DC-41	nd	nd	46	49	22	60	0.85	160	3,600	690	10.00	0.59	3.30	3.90	2.40
DC-42	nd	nd	29	46	1	34	0.88	160	2,100	910	9.60	0.46	4.60	2.80	1.40
DC-43	nd	nd	62	47	5	160	0.57	180	2,700	350	10.00	0.76	1.40	3.90	1.70
DC-44	nd	nd	63	54	3	260	0.92	270	3,100	520	12.00	1.40	2.60	7.00	1.40
DC-45	5	nd	68	43	21	200	0.62	180	3,500	350	8.10	2.30	0.96	4.50	2.80
DC-46	10	nd	69	42	95	250	0.69	210	4,100	430	7.90	1.90	2.90	5.40	3.00
DC-47	nd	nd	41	39	2	120	0.38	140	2,300	260	14.00	0.08	1.00	3.30	1.70
DC-34	8	nd	95	54	nd	180	0.99	270	1,200	620	8.80	2.10	0.50	7.90	5.00
DC-36	nd	nd	7	6	nd	6	0.20	20	610	190	2.80	1.90	2.60	3.10	0.63
DC-37	nd	nd	37	44	nd	48	0.81	120	2,000	580	7.60	0.33	4.80	2.30	1.50
DC-39	6	nd	94	49	24	310	0.75	230	4,400	300	9.70	3.20	0.18	7.10	4.00
DC-17	nd	nd	15	36	2	40	1.00	86	3,700	850	7.80	3.20	2.60	5.10	1.10
DC-18	nd	nd	21	41	2	44	1.00	66	1,900	940	8.20	0.75	3.30	2.90	1.30
DC-19	nd	nd	120	47	1	200	0.96	130	5,900	750	7.20	0.27	7.10	8.90	1.70
DC-20	nd	nd	120	45	1	190	0.30	120	6,000	740	7.00	0.19	6.70	8.00	1.70
DC-21	nd	nd	98	42	3	180	0.98	120	5,800	870	7.60	0.18	6.70	8.50	1.60
DC-26	nd	nd	7	9	nd	6	0.26	28	720	400	4.00	1.70	4.00	1.30	0.58
DC-27	nd	nd	8	10	nd	4	0.33	58	460	530	3.40	1.30	5.10	1.00	0.57
DC-28	nd	nd	7	9	nd	4	0.32	44	1,300	450	3.40	1.60	3.80	2.40	0.83
DC-32	nd	nd	9	19	nd	2	0.87	54	1,900	2,100	5.90	2.50	2.80	4.10	1.70
DC-33	nd	nd	9	21	nd	nd	0.84	48	1,800	2,200	6.60	2.60	2.70	3.70	1.70

APPENDIX C

Geochemical Data - Mineralized Outcrop Samples

List of Rock Type Abbreviations

F = felsic	bx = breccia	a = amygdaloidal
M = mafic	v = volcanic	fb = flow-banded
SED = sediment		p = porphyritic
V = vein		t = tuffaceous
I = intrusion		

nd = not detected

NA = not analysed

Rock types are classified on the basis of field note descriptions. The terms "felsic" and "mafic" refer to light and dark colouration and do not necessarily imply acidic or basic compositions. Rocks of uncertain affinities are designated by a question mark.

Geochemical Data - Mineralized Samples

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
602	21 O/16 A	Lower Jack Burns L	Fv fb	5	14	84	nd	nd	22	4.5	600	nd	3
101	21 O/16 B	Big Hole	Mvt	360	13,000	22,000	31	3.0	17	2.4	420	nd	9
102	21 O/16 B	Big Hole	V	1,500	21,000	90,000	21	5.0	23	6.2	2,620	nd	19
106	21 O/16 B	Big Hole	Mv	170	1,400	1,500	nd	nd	35	4.8	62	nd	33
108	21 O/16 A	Big Hole	Mvt	3	38	5,800	nd	nd	18	0.8	34	nd	6
131	21 O/16 B	Big Hole	V	210	1,700	5,800	nd	nd	2	0.4	640	nd	5
163	21 O/16 A	Big Hole	Mvt	740	16	170	8	nd	32	1.0	17	0.2	5
193	21 O/16 B	Big Hole	V	1,600	29,000	52,000	26	8.0	35	6.6	2,700	0.1	12
621	21 O/16 A	Big Hole S. Trib.	V	1	94	60	14	0.5	20	2.2	28	nd	nd
623	21 O/16 A	Big Hole S. Trib.	Fv?	39	80	510	10	2.0	170	2.2	210	0.1	2
624	21 O/16 A	Big Hole S. Trib.	Fv?	34	40	230	1	0.5	99	1.6	35	nd	2
625	21 O/16 A	Big Hole S. Trib.	Sed?	1	380	950	20	1.0	7	1.6	70	nd	nd
113	21 O/16 A	Mclean	Fv bx	6	120	56	nd	nd	22	2.9	150	nd	5
174	21 O/16 A	Mclean	Fvt	9	6	70	nd	nd	3	1.1	160	nd	4
189	21 O/16 A	Mclean	Fvt	24	170	510	nd	nd	57	5.6	160	0.2	5
627A	21 O/16 A	McLean	Fvt	41	150	510	1	1.0	57	1.1	780	1.1	3
224	21 O/16 A	Little Ramsay	Mv bx	5	140	1,600	nd	nd	26	3.7	230	0.2	8
306	21 O/16 B	Big Ramsay	Mva	520	4	340	2	nd	5	0.9	7	0.2	1
630	21 O/16 B	Big Ramsay	Mva	6	2	170	5	nd	4	0.4	24	0.1	nd
631	21 O/16 B	Big Ramsay	Mva	40	4	350	2	nd	5	2.2	8	0.2	2
632	21 O/16 B	Big Ramsay	Mvt	49	14	290	1	nd	13	2.9	10	0.2	2
633	21 O/16 B	Big Ramsay	Mva	280	8	360	nd	nd	6	1.5	5	0.3	2
329	21 O/16 B	Big Ramsay N. Trib	Mv bx	30	98	450	7	nd	66	1.0	41	61.0	92
330	21 O/16 B	Big Ramsay N. Trib	Mvt	20	14	99	2	nd	45	0.8	38	31.0	17
331C	21 O/16 B	Big Ramsay N. Trib	Fvt	74	16	51	24	nd	32	1.9	4	1.3	12
638	21 O/16 B	Big Ramsay N. Trib	Fv	89	12	48	12	nd	13	0.5	5	1.0	7
641	21 O/16 B	Big Ramsay N. Trib	gossan	9	26	110	1	nd	110	1.2	23	32.0	14
642	21 O/16 B	Big Ramsay N. Trib	gossan	8	18	150	nd	nd	62	0.8	26	21.0	17
322	21 O/16 B	Pb Gulch	Mv	46	3,100	12,000	nd	nd	6	0.6	680	3.8	3
673	21 O/16 B	Little McLean	Fvt?	17	2	110	5	nd	20	1.2	630	nd	4
675	21 O/16 B	Little McLean	Fvt	11	12	63	nd	1.5	190	12.0	250	0.2	4
676	21 O/16 B	Little McLean	Fvt	16	18	130	nd	nd	47	12.0	180	0.5	8
368	21 O/16 B	Falls Gulch	Fv	7	18	86	nd	nd	16	3.9	170	0.1	2
369	21 O/16 B	Falls Gulch	Fv	12	100	150	nd	nd	160	9.1	360	0.1	3
378	21 O/16 B	Falls Gulch	Fv	4	30	93	nd	0.5	33	3.8	420	nd	2
381	21 O/16 B	Falls Gulch	Fv	7	20	120	nd	nd	12	2.9	210	nd	2
383	21 O/16 B	Falls Gulch	Fv bx	14	120	360	nd	nd	17	3.2	1,240	0.3	3
628	21 O/16 B	Falls Gulch	Fvt	7	84	340	nd	nd	40	5.9	430	0.1	4

Geochemical Data - Mineralized Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
602	5	nd	4	5	nd	4	0.087	8	8,000	120	2.00	0.79	3.00	11.00	0.27
101	nd	nd	12	29	120	12	0.87	130	2,200	1,400	5.60	2.20	0.87	2.50	1.30
102	24	nd	6	18	650	12	0.28	44	3,000	540	3.10	0.60	0.60	2.00	0.59
106	nd	nd	22	33	7	36	1.00	180	3,300	1,000	4.60	1.10	1.00	7.90	1.50
108	nd	nd	3	6	1	6	0.24	14	860	150	4.30	2.70	1.90	0.89	0.69
131	17	nd	4	2	97	10	0.01	16	8,400	70	1.40	0.21	0.07	32.00	0.71
163	5	nd	27	55	nd	40	1.30	220	1,000	2,000	7.30	2.80	1.10	2.60	3.20
193	7	nd	8	12	560	8	0.073	18	3,200	240	2.20	0.090	0.31	1.60	0.43
621	15	nd	2	2	nd	6	0.007	2	3,600	40	1.20	0.14	0.33	27.00	0.23
623	15	nd	31	38	3	96	0.95	100	2,500	730	6.10	1.90	5.00	6.50	0.68
624	18	nd	72	55	nd	120	1.20	210	1,900	930	7.40	2.60	3.80	4.00	1.40
625	17	nd	6	5	4	6	0.012	6	8,600	50	7.10	0.13	0.09	20.00	4.20
113	8	nd	2	6	nd	2	0.20	8	92	250	2.00	0.14	7.30	0.04	0.08
174	nd	nd	3	5	nd	2	0.13	14	810	130	2.00	2.20	3.30	1.70	0.39
189	nd	nd	34	42	3	50	0.62	84	570	710	5.20	0.49	1.40	0.96	0.80
627A	nd	nd	4	6	3	nd	0.13	12	320	140	2.90	2.20	3.10	0.64	0.46
224	5	nd	12	48	3	4	0.94	190	2,500	3,000	9.50	1.20	2.30	1.20	1.70
306	nd	nd	98	31	nd	180	1.00	180	2,100	800	13.00	1.90	0.12	4.20	3.90
630	11	nd	63	34	nd	48	0.43	140	2,300	560	5.80	1.20	0.80	8.00	1.90
631	7	nd	100	35	nd	160	0.84	150	1,800	880	9.70	2.60	0.78	2.30	2.50
632	nd	nd	110	46	nd	220	0.71	190	1,700	570	6.90	2.30	0.94	8.60	1.70
633	nd	nd	130	49	nd	290	0.86	180	2,000	640	8.70	3.70	0.67	5.60	2.90
329	5	nd	9	80	nd	8	0.79	140	2,800	810	16.00	1.70	0.05	0.11	4.30
330	5	nd	16	41	nd	12	0.63	100	980	790	6.60	2.50	0.40	0.12	1.60
331C	nd	nd	2	12	nd	nd	0.20	12	410	190	2.30	0.22	7.80	0.05	0.51
638	nd	nd	3	8	nd	4	0.22	12	200	220	2.10	0.17	7.00	0.04	0.41
641	nd	6.7	6	17	nd	16	0.37	98	650	470	9.00	0.75	0.10	0.07	1.80
642	nd	2.0	10	23	nd	18	0.48	110	1,000	690	8.30	1.30	0.10	0.08	2.80
322	nd	nd	18	44	42	36	1.20	210	3,700	860	7.80	3.60	0.07	3.10	2.30
673	8	nd	9	13	nd	12	0.48	36	440	760	3.60	6.40	0.45	1.90	0.97
675	nd	nd	5	7	nd	4	0.16	6	230	110	2.80	1.60	5.60	0.03	0.12
676	nd	nd	6	6	nd	8	0.16	4	1,100	170	4.10	0.76	7.10	0.04	0.09
368	nd	nd	3	4	nd	nd	0.13	4	40	130	1.70	0.05	4.10	0.02	0.12
369	nd	nd	2	4	5	nd	0.13	4	50	140	2.60	0.07	3.30	0.03	0.16
378	nd	nd	2	3	nd	2	0.13	10	88	40	3.00	0.092	6.50	0.03	0.11
381	nd	0.2	4	3	nd	nd	0.13	2	190	70	2.50	0.11	4.60	0.04	0.15
383	nd	nd	4	4	6	2	0.13	8	470	130	0.87	0.15	6.00	0.03	0.07
628	nd	nd	2	7	2	13	0.25	36	26	120	1.50	0.22	5.60	0.03	0.07

Geochemical Data - Mineralized Samples

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
370A	21 O/16 B	Falls Gulch N.Trib	Fvt	7	20	130	nd	nd	59	11.0	310	0.1	2
370B	21 O/16 B	Falls Gulch N.Trib	Fv bx	5	18	270	2	nd	23	10.0	81	0.1	2
371	21 O/16 B	Falls Gulch N.Trib	Fvt	7	58	180	nd	0.5	69	9.8	250	nd	2
373	21 O/16 B	Falls Gulch N.Trib	Fv fb	5	38	150	nd	1.0	23	6.7	340	nd	2
375	21 O/16 B	Falls Gulch N.Trib	Fv fb	5	44	150	nd	nd	22	10.0	17	nd	2
377	21 O/16 B	Falls Gulch N.Trib	Fvt	64	1,000	1,600	nd	7.0	340	14.0	5,010	0.1	4
380	21 O/16 B	Bear Trap Rd.	Fvt	18	26	50	nd	nd	47	19.0	520	0.1	3
240	21 O/16 B	Wildcat	Hvt	930	24	380	nd	nd	43	1.6	7	0.6	9
242	21 O/16 B	Wildcat	Fv bx	160	2,800	9,200	18	5.0	32	3.9	1,980	0.2	3
243	21 O/16 B	Wildcat	Hvt	990	25,000	35,000	39	1,500	52	8.5	7,490	0.9	2
648	21 O/16 B	Wildcat	Hv bx	820	21,000	29,000	15	280	24	2.5	6,370	1.4	9
679A	21 O/16 B	Wildcat	Fv	100	820	1,300	4	4.5	110	3.1	430	nd	3
679B	21 O/16 B	Wildcat	Fv bx	160	680	550	2	12.0	110	3.3	570	nd	3
403	21 O/16 B	Hayes Gulch	Fvt?	26	440	1,100	nd	0.5	21	2.9	42	0.1	5
404	21 O/16 B	Hayes Gulch	Fv bx	63	110	1,800	nd	nd	25	1.7	28	0.6	6
406	21 O/16 B	Hayes Gulch	Fv?	32	340	840	5	nd	55	1.8	230	0.1	5
413	21 O/16 B	Hayes Gulch	Fvt	32	38	570	2	nd	110	4.2	13	0.2	3
417	21 O/16 B	Hayes Gulch	Fv bx	30	260	960	nd	1.0	81	4.6	88	nd	6
420	21 O/16 B	Hayes Gulch	Fv bx	32	90	270	3	nd	36	3.5	180	nd	6
687	21 O/16 B	Hayes Gulch	Fv	51	280	1,100	nd	nd	46	2.8	92	0.1	3
688	21 O/16 B	Hayes Gulch	Fvt	45	310	320	2	4.5	390	14.0	390	0.1	9
693	21 O/16 B	Hayes Gulch	Fv bx	54	100	1,900	nd	nd	22	1.5	14	0.7	10
405	21 O/16 B	Hayes N. Trib.	Fvt	230	2,800	2,000	6	nd	19	1.7	140	0.3	16
689	21 O/16 B	Hayes N. Trib.	Fv	33	520	2,200	nd	nd	8	1.0	33	0.1	4
690	21 O/16 B	Hayes N. Trib.	Fv	41	2,000	5,100	nd	nd	5	0.8	65	0.1	3
424	21 O/16 B	Hayes S. Trib.	Hva	31	16	150	nd	1.0	24	5.5	160	nd	7
425	21 O/16 B	Hayes S. Trib.	Hva	84	56	550	nd	6.0	96	5.3	990	nd	4
427	21 O/16 B	Hayes S. Trib.	Fvt	19	420	420	nd	28.0	64	18.0	2,370	nd	3
553	21 O/16 B	McNeill Tr #3	bx	4,500	290	1,200	3	2.5	8	nd	26	72.0	50
554	21 O/16 B	McNeill Tr #5	Hv	92	120	4,800	1	0.5	42	1.1	96	2.1	5
555	21 O/16 B	McNeill Tr #5	Hv?	1,400	480	960	1	2.5	110	1.9	88	9.4	10
557	21 O/16 B	McNeill Tr #5	Hv?	500	1,100	6,700	4	1.0	72	1.3	57	4.3	10
560	21 O/16 B	McNeill Tr #3	bx	2,300	92	760	nd	0.5	73	3.7	27	5.2	11
341	21 O/16 B	McNeill	Hv	370	56	530	nd	nd	22	1.4	41	8.6	13
343	21 O/16 B	McNeill	Fv	34	20	69	2	nd	9	0.8	nd	1.3	18
345	21 O/16 B	McNeill	Fv bx	230	14	210	nd	nd	26	3.2	21	1.8	10
346	21 O/16 B	McNeill	Fvt	170	26	330	nd	nd	15	0.9	11	6.7	5
349A	21 O/16 B	McNeill	V	190	62	34	nd	nd	100	3.2	35	18.0	31
349B	21 O/16 B	McNeill	V	350	60	140	1	nd	100	2.6	80	28.0	160
351	21 O/16 B	McNeill	Fv?	210	310	110	25	nd	200	4.3	59	nd	5
359	21 O/16 B	McNeill	Fvt	46	230	1,400	nd	nd	7	2.5	190	nd	3
361	21 O/16 B	McNeill	Hvt	50	410	1,000	nd	nd	9	0.5	62	nd	2
665	21 O/16 B	McNeill	Hvt?	46	520	860	39	nd	32	1.8	200	0.1	5
669	21 O/16 B	McNeill	Hva	160	220	150	19	nd	170	3.1	89	nd	4

Geochemical Data - Mineralized Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
370A	nd	nd	3	4	nd	nd	0.11	nd	670	120	1.70	0.08	5.00	0.03	0.04
370B	nd	nd	3	4	nd	nd	0.13	6	200	80	4.30	0.08	3.60	0.03	0.03
371	nd	nd	2	5	nd	nd	0.11	nd	1,500	100	2.70	0.08	4.50	0.03	0.06
373	6	nd	2	3	nd	4	0.14	4	78	130	1.60	0.12	4.80	0.02	0.05
375	9	nd	2	3	nd	2	0.13	6	48	140	2.10	0.12	7.40	0.03	0.074
377	7	nd	4	3	5	4	0.075	8	190	110	6.00	0.08	4.40	0.03	0.084
380	nd	nd	5	8	nd	nd	0.11	8	8,600	130	2.00	0.15	6.10	0.08	0.13
240	nd	nd	11	15	nd	20	0.33	78	1,700	340	4.90	0.80	5.50	0.07	0.66
242	14	nd	9	14	41	6	0.39	48	1,800	660	3.10	0.14	7.60	0.69	0.20
243	33	nd	9	41	130	24	0.73	170	3,400	580	5.00	0.54	3.00	1.50	2.40
648	16	nd	12	50	86	12	0.85	210	3,500	700	6.10	0.83	4.90	2.80	2.60
679A	nd	nd	3	8	13	10	0.39	38	180	690	2.60	0.15	9.40	0.03	nd
679B	nd	nd	3	8	2	6	0.34	30	130	680	2.60	0.16	9.50	0.06	0.02
403	5	nd	5	20	4	6	0.76	50	2,400	1,400	5.40	1.80	4.10	0.86	0.80
404	5	nd	4	19	9	6	0.62	46	2,200	980	5.30	1.20	3.50	0.91	0.60
406	nd	nd	9	26	5	22	0.84	94	1,700	1,900	6.20	1.30	4.20	0.72	1.10
413	nd	nd	4	10	4	nd	0.07	4	19,000	110	2.40	0.10	6.20	0.08	0.13
417	nd	nd	11	31	6	10	0.66	140	2,000	770	3.60	0.17	6.70	0.72	0.03
420	nd	nd	7	4	2	6	0.11	12	68	98	1.70	0.13	7.10	0.02	0.04
687	nd	nd	16	50	4	36	1.40	350	5,200	1,300	7.40	2.60	3.60	2.80	0.77
688	nd	nd	7	20	4	8	0.58	86	98	770	2.90	0.12	5.90	0.04	0.07
693	nd	nd	5	30	8	8	0.61	48	2,700	1,300	6.40	1.10	4.70	1.40	0.80
405	nd	nd	12	25	9	34	0.87	98	910	1,500	5.40	1.40	4.20	0.63	0.66
689	6	nd	15	38	8	26	0.76	66	3,000	2,000	7.20	1.90	5.30	1.20	0.73
690	nd	nd	9	30	21	14	0.64	60	2,400	1,600	6.30	2.60	2.60	2.10	0.82
424	5	nd	36	41	2	180	1.30	300	3,300	980	6.50	0.16	7.00	6.10	1.00
425	nd	0.6	33	38	11	110	0.99	270	4,900	780	6.50	0.18	6.60	12.00	0.87
427	nd	nd	8	10	nd	nd	0.25	36	120	390	2.00	0.11	7.10	0.06	0.07
553	nd	nd	23	69	4	34	0.25	70	1,800	400	20.00	0.05	0.07	0.06	1.1
554	nd	nd	9	50	22	16	0.80	80	2,300	690	14.00	1.00	1.90	0.12	1.20
555	nd	nd	18	21	2	24	0.16	76	500	220	8.50	0.05	0.41	0.05	0.52
557	7	nd	99	64	71	230	0.78	200	4,000	680	11.00	0.59	5.50	0.11	1.70
560	nd	nd	21	27	3	38	0.22	58	1,300	230	5.90	0.07	0.53	1.00	0.76
341	13	nd	52	50	3	68	0.33	64	2,400	340	8.10	0.69	1.80	1.50	1.80
343	16	nd	3	15	nd	8	0.14	4	140	140	2.20	0.15	6.20	0.02	0.11
345	6	nd	4	10	2	2	0.083	8	970	98	2.20	0.07	3.20	0.56	0.23
346	7	nd	30	56	nd	47	0.84	160	2,000	1,100	9.60	0.34	4.60	0.14	1.50
349A	nd	nd	2	9	nd	12	0.27	60	140	380	7.70	0.33	0.82	0.05	0.19
349B	nd	nd	9	39	nd	18	0.31	64	1,000	320	8.00	0.12	0.45	0.05	0.96
351	nd	nd	8	31	1	4	0.86	52	1,100	2,300	5.50	3.60	0.53	0.99	1.10
359	nd	nd	19	27	4	28	1.00	140	3,400	1,700	6.70	0.38	7.70	2.00	1.00
361	nd	0.4	69	35	5	86	0.61	130	2,900	360	6.10	2.50	0.98	3.20	2.60
665	nd	nd	23	29	3	36	0.68	96	1,800	1,300	6.30	0.15	6.50	0.54	0.63
669	nd	nd	7	28	nd	nd	1.20	60	2,000	2,600	6.80	4.30	0.56	0.89	1.10

Geochemical Data - Mineralized Samples

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
680	21 O/16 B	McNeill	Mv	2,100	48	250	5	0.5	90	1.5	49	12.0	100
682	21 O/16 B	McNeill	Mva	25	38	370	nd	nd	34	0.6	34	2.7	10
388	21 O/16 B	McNeill N. Trib.	Mvt	57	88	1,400	nd	nd	44	1.8	130	1.8	8
389	21 O/16 B	McNeill N. Trib.	bx	290	710	11,000	7	1.0	200	3.3	1,320	5.8	51
684	21 O/16 B	McNeill N. Trib.	bx	200	280	8,700	13	nd	220	3.6	600	5.0	43
663A	21 O/16 B	McNeill S. Trib.	Fv	20	620	1,600	1	nd	9	1.7	220	nd	3
663C	21 O/16 B	McNeill S. Trib.	Fv?	81	350	1,900	1	nd	27	2.7	600	0.1	2
663D	21 O/16 B	McNeill S. Trib.	Mv?	660	520	2,300	2	nd	71	14.0	880	6.2	6
663 F	21 O/16 B	McNeill S. Trib.	Fv	10	24	450	140	nd	8	1.6	69	nd	3
664A	21 O/16 B	McNeill S. Trib.	Fv	22	680	3,700	9	nd	27	1.9	170	nd	3
664B	21 O/16 B	McNeill S. Trib.	Fv	59	1,400	3,900	2	nd	11	1.7	340	nd	4
664C	21 O/16 B	McNeill S. Trib.	Fv	13	700	2,000	2	nd	36	1.6	67	nd	4
440	21 O/16 B	Lower McNair	Mv	930	6	200	1	2.0	11	1.0	8	0.7	4
444	21 O/16 B	Lower McNair	V	51	3,100	7,600	9	15.0	43	13.0	75	nd	4
452	21 O/16 B	Lower McNair		24	58	150	2	1.5	580	7.7	75	0.2	36
462	21 O/16 B	Lower McNair	Mv?	610	2	67	nd	nd	21	0.4	13	1.2	8
671	21 O/16 B	Lower McNair	Mva	22	28	200	20	0.5	46	0.9	47	nd	10
672A	21 O/16 B	Lower McNair	Mvt	6,400	16	250	20	0.5	15	0.4	13	0.7	7
469	21 O/9 F	Upper McNair		3,600	800	900	3	25.0	19	13.0	nd	12.9	4
472	21 O/9 G	Upper McNair	Fv bx	44	310	350	nd	12.0	73	78.0	1,490	0.2	15
473	21 O/9 G	Upper McNair	Fvt?	10	4,800	1,000	3	1.0	27	4.1	200	0.2	16
487	21 O/9 F	Upper McNair	Sed	18	350	54	nd	13.0	71	6.6	24	9.7	1
597	21 O/9 F	Upper McNair	V	290	1,600	980	12	25.0	110	13.0	44	22.0	42
598	21 O/9 F	Upper McNair	bx	880	1,400	980	3	12.0	59	28.0	7	0.1	4
599	21 O/9 F	Upper McNair	Sed	210	3,800	1,100	2	7.0	42	5.9	7	nd	1
745	21 O/9 F	Rocky Gulch	Sed	34	32	720	17	nd	6	16.0	220	0.2	4
888	21 O/9 F	Rocky Brook	Fv	32	120	160	7	30.0	100	100	48	nd	3
889	21 O/10 H	9 Mile Bk. Road	Fv?	28	38	76	nd	1.0	95	3.7	26	nd	5
895A	21 O/10 H	9 Mile Bk. Road	V	750	50	56	16	2.5	320	23.0	520	4.6	4
895B	21 O/10 H	9 Mile Bk. Road	V	5,400	190	550	420	9.0	540	39.0	900	41.0	9
896	21 O/10 H	9 Mile Bk. Road	V	1,700	240	220	630	14.0	30	17.0	980	258	6
897	21 O/10 H	9 Mile Bk. Road	MI	32	28	170	6	nd	27	4.2	300	5.5	5
898	21 O/10 H	9 Mile Bk. Road	V	83,000	3,800	470	1,200	200	95	28.0	6,530	723	4
899	21 O/10 H	9 Mile Bk. Road	MI	230	22	91	nd	nd	27	7.7	370	2.2	5

Geochemical Data - Mineralized Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
680	5	nd	13	48	nd	30	0.43	120	1,500	320	9.60	0.73	0.02	0.45	1.30
682	5	nd	23	44	nd	36	0.68	150	2,200	1,000	10.00	1.70	2.60	0.82	2.00
386	5	nd	24	46	6	40	0.81	160	2,400	1,100	7.20	1.10	5.30	1.20	1.70
389	5	nd	16	48	50	22	0.50	130	3,600	670	9.80	0.34	1.90	2.00	1.90
684	6	nd	14	42	43	22	0.48	120	2,700	640	10.00	0.64	2.60	0.79	1.50
663A	nd	nd	17	33	10	56	0.83	400	3,600	890	6.20	3.40	3.30	2.50	1.30
663C	nd	nd	13	21	12	26	0.52	58	3,500	650	5.90	0.16	5.20	2.60	0.79
663D	5	nd	11	27	15	38	0.64	100	1,300	390	4.90	1.40	0.28	0.54	0.81
663 F	7	nd	20	30	2	54	0.84	260	4,400	790	6.40	1.60	5.30	4.60	1.60
664A	nd	nd	22	43	13	50	0.81	110	4,500	870	7.20	3.30	2.40	2.70	1.10
664B	nd	nd	20	46	29	50	0.97	130	5,000	920	7.20	2.30	3.40	3.80	1.00
6+4C	nd	nd	23	62	6	64	0.89	92	4,000	920	7.90	4.00	1.20	2.00	1.20
440	nd	nd	7	47	nd	nd	1.60	140	1,600	4,400	9.30	3.00	0.18	2.70	3.40
444	6	nd	6	8	46	nd	0.012	76	4,300	50	2.60	0.09	0.18	5.70	0.33
452	nd	nd	40	68	nd	20	1.40	400	2,300	1,400	7.80	4.30	0.20	2.80	1.10
462	22	5	44	93	nd	48	2.70	380	880	1,800	9.60	2.70	0.44	5.80	3.10
671	nd	nd	9	46	nd	12	1.50	250	980	2,000	7.80	4.50	0.64	0.18	0.63
672A	nd	nd	23	55	nd	76	1.30	250	1,400	1,200	7.30	3.40	4.70	0.13	1.60
469	12	nd	7	27	9	14	0.27	46	1,200	370	3.70	0.07	0.49	1.20	1.10
472	17	nd	3	3	3	6	0.12	4	72	90	0.66	0.08	5.10	0.02	0.03
473	13	nd	3	4	21	8	0.12	6	500	110	0.39	0.14	7.00	3.00	0.12
487	nd	nd	2	2	nd	4	0.06	12	52	30	0.76	0.03	0.39	0.03	0.09
597	nd	nd	12	43	6	16	0.23	38	0.37	650	9.40	0.09	0.86	0.07	3.30
598	nd	nd	6	9	7	12	0.24	40	0.074	390	2.00	0.05	2.20	0.08	0.38
599	nd	nd	5	5	7	18	0.077	18	0.022	120	2.20	0.03	0.34	0.04	0.17
745	nd	nd	71	32	5	60	0.30	68	1,400	460	6.10	0.13	1.30	13.00	1.40
888	nd	nd	21	11	1	140	0.43	130	160	250	2.40	0.08	3.00	0.13	0.63
889	nd	nd	12	17	nd	74	0.51	72	700	320	3.20	2.10	1.60	2.50	0.79
895A	8	nd	11	25	nd	20	0.19	60	3,800	370	2.80	0.17	1.10	15.00	0.26
895B	nd	nd	21	53	3	8	0.08	42	2,500	210	6.60	0.15	0.52	8.40	0.28
896	nd	nd	11	15	nd	8	0.26	52	1,200	500	5.20	0.07	1.40	1.00	0.33
897	9	nd	12	20	nd	12	0.39	70	1,400	750	4.70	0.55	2.90	2.30	0.74
898	10	nd	8	25	3	nd	0.02	38	610	640	18.00	0.05	0.37	0.61	0.18
899	6	nd	15	27	1	14	0.78	130	2,500	1,700	4.20	1.60	1.80	2.80	0.78

APPENDIX D

Geochemical Data - All Samples with Detectable Gold

List of Rock Type Abbreviations

F = felsic	bx = breccia	a = amygdaloidal
M = mafic	v = volcanic	fb = flow-banded
SED = sediment		p = porphyritic
V = vein		t = tuffaceous
I = intrusion		

nd = not detected

NA = not analysed

Rock types are classified on the basis of field note descriptions. The terms "felsic" and "mafic" refer to light and dark colouration and do not necessarily imply acidic or basic compositions. Rocks of uncertain affinities are designated by a question mark.

Detectable Gold - Outcrop Samples

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
100	21 O/16 B	Big Hole	Mvt	2	14	270	1	nd	6	0.4	7	nd	3
101	21 O/16 B	Big Hole	Mvt	360	13,000	22,000	31	3.0	17	2.4	420	nd	9
102	21 O/16 B	Big Hole	V	1,500	21,000	90,000	21	5.0	23	6.2	2,620	nd	19
104	21 O/16 B	Big Hole	Mva	1	24	120	1	nd	16	1.3	14	nd	4
110	21 O/16 A	Big Hole	Mvt	3	26	410	2	nd	20	0.9	34	nd	9
115	21 O/16 A	Big Hole S.Trib	Fv	4	20	170	2	nd	10	3.2	24	nd	3
117A	21 O/16 A	Big Hole S.Trib	Fvt	7	10	170	2	nd	39	0.9	7	0.2	5
118	21 O/16 A	Big Hole S.Trib	Fv	18	12	210	1	nd	32	1.2	10	nd	2
119	21 O/16 A	Big Hole S.Trib	Fv bx	110	16	90	3	nd	71	1.4	14	nd	3
146	21 O/16 A	Big Hole	Fvt	8	8	44	1	nd	30	5.6	14	0.4	3
147	21 O/16 A	Big Hole	Fvt	7	14	110	2	nd	7	1.9	7	0.5	2
154	21 O/16 A	Big Hole	Mva	72	4	63	1	nd	3	0.5	7	nd	6
156	21 O/16 A	Big Hole	Fv	26	22	130	16	nd	16	0.9	6	nd	12
159	21 O/16 A	Big Hole	Fv bx	15	14	220	9	nd	58	0.6	17	0.3	4
163	21 O/16 A	Big Hole	Mvt	740	16	170	8	nd	32	1.0	17	0.2	5
164	21 O/16 A	Big Hole	Mv?	18	24	140	2	nd	52	2.2	8	nd	8
165	21 O/16 A	Big Hole	Fvt	16	12	90	1	nd	30	1.2	3	nd	8
166	21 O/16 A	Big Hole	Fvt	5	20	86	7	nd	54	1.0	7	0.1	9
167	21 O/16 A	Big Hole	Fvt	6	24	70	1	nd	33	1.6	7	nd	6
175	21 O/16 A	Mclean	Fvt	100	14	40	4	nd	62	0.8	54	nd	7
180	21 O/16 A	Mclean	Fv bx	14	12	26	3	nd	23	5.1	38	nd	8
182	21 O/16 A	Mclean	Fv fb	9	12	32	3	nd	10	3.6	78	nd	4
183	21 O/16 A	Mclean	Fv bx	11	10	43	3	nd	10	3.9	83	nd	5
185	21 O/16 A	Mclean	Mvt	10	2	130	3	nd	5	2.5	25	0.1	3
193	21 O/16 B	Big Hole	V	1,600	29,000	52,000	26	8.0	35	6.6	2,700	0.1	12
206A	21 O/16 B	Little Ramsay	Fv?	5	50	670	2	nd	14	1.2	170	nd	4
218	21 O/16 B	Little Ramsay	Fv	1	24	150	4	nd	26	1.8	17	nd	7
242	21 O/16 B	Wildcat	Fv bx	160	2,800	9,200	18	5.0	32	3.9	1,980	0.2	3
243	21 O/16 B	Wildcat	Mvt	990	25,000	35,000	39	1,500	52	8.5	7,490	0.9	2
244	21 O/16 B	Wildcat	Fv	21	150	180	1	7.0	42	5.4	66	0.2	3
300	21 O/16 B	Big Ramsay	Mva	60	16	290	1	nd	5	1.2	7	0.2	4
302	21 O/16 B	Big Ramsay	Mva	nd	4	250	6	nd	3	0.5	10	0.8	8
306	21 O/16 B	Big Ramsay	Mva	520	4	340	2	nd	5	0.9	7	0.2	1
307	21 O/16 B	Big Ramsay	Mva	9	12	170	2	nd	10	1.2	7	0.2	3
311	21 O/16 B	Big Ramsay	Mv	8	2	220	4	nd	4	0.9	13	nd	5
319	21 O/16 B	Big Ramsay	Fv bx	11	24	140	1	nd	29	2.3	48	0.9	7
320	21 O/16 B	Big Ramsay	Fvt	42	40	31	1	nd	11	0.9	26	1.8	7
327	21 O/16 B	Big Ramsay	Fvt	6	6	16	1	nd	8	0.9	13	0.2	4
329	21 O/16 B	N.Trib.Big Ramsay	Mv bx	30	98	450	7	nd	66	1.0	41	61.0	92
330	21 O/16 B	N.Trib.Big Ramsay	Mvt	20	14	99	2	nd	45	0.8	38	31.0	17
331B	21 O/16 B	N.Trib.Big Ramsay	Mvt	170	10	180	4	nd	17	1.0	18	1.6	7
331C	21 O/16 B	N.Trib.Big Ramsay	Fvt	74	16	51	24	nd	32	1.9	4	1.3	12
332	21 O/16 B	Pb Gulch	Mvt?	3	280	950	1	nd	20	2.4	39	0.3	4
334	21 O/16 B	N.Trib.Big Ramsay	Mvt	5	14	690	1	nd	13	0.4	7	0.3	5
336	21 O/16 B	N.Trib.Big Ramsay	Fv bx	10	24	170	2	nd	15	2.2	81	1.7	23
343	21 O/16 B	McNeill	Fv	34	20	69	2	nd	9	0.8	nd	1.3	18
349B	21 O/16 B	McNeill	V	350	60	140	1	nd	100	2.6	80	28.0	160
351	21 O/16 B	McNeill	Fv?	210	310	110	25	nd	200	4.3	59	nd	5

Detectable Gold - Outcrop Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
100	nd	nd	17	43	nd	12	1.20	190	660	1,100	6.20	2.20	1.70	5.10	2.30
101	nd	nd	12	29	120	12	0.87	130	2,200	1,400	5.60	2.20	0.87	2.50	1.30
102	24	nd	6	18	650	12	0.28	44	3,000	540	3.10	0.60	0.60	2.00	0.59
104	nd	nd	20	35	nd	10	1.20	170	1,600	1,500	5.80	2.80	1.80	6.70	2.20
110	nd	nd	2	5	2	4	0.25	12	750	150	4.30	2.00	2.30	0.95	0.68
115	10	nd	60	43	nd	120	1.40	290	4,200	970	810	2.20	3.20	5.20	1.90
117A	nd	nd	15	40	nd	6	1.10	160	1,400	1,700	6.80	2.90	3.50	2.80	0.72
118	14	nd	70	52	nd	120	1.30	240	1,700	890	7.10	3.30	1.00	4.80	2.00
119	6	nd	13	15	nd	10	0.46	40	3,200	560	5.70	0.64	8.80	0.87	0.29
146	8	nd	7	6	nd	2	0.07	8	1,700	50	2.20	0.17	4.80	0.88	0.30
147	nd	nd	11	6	nd	6	0.04	22	5,800	70	3.20	0.18	1.30	16.00	1.50
154	12	nd	16	23	nd	18	0.60	96	3,000	860	3.40	0.96	1.30	9.20	0.84
156	nd	nd	34	45	nd	16	0.92	180	1,300	1,400	6.00	2.20	1.40	8.00	1.40
159	5	nd	16	27	nd	10	0.67	110	5,000	890	7.70	1.40	1.00	11.00	4.80
163	5	nd	27	55	nd	40	1.30	220	1,000	2,000	7.30	2.80	1.10	2.60	3.20
164	5	nd	15	56	nd	12	1.40	250	950	1,800	7.80	3.30	1.10	2.20	2.10
165	11	nd	9	19	nd	12	0.56	34	1,200	830	3.90	2.00	5.30	1.60	0.42
166	7	nd	7	15	nd	10	0.40	40	1,700	650	4.90	0.97	3.30	3.20	0.49
167	8	nd	3	8	nd	2	0.21	12	1,400	270	2.10	1.10	4.10	1.50	0.30
175	5	nd	3	10	nd	2	0.12	10	420	120	2.40	3.00	1.60	0.88	0.32
180	8	nd	3	8	nd	2	0.09	12	1,800	80	1.90	0.37	3.40	0.87	0.21
182	8	nd	2	7	nd	2	0.12	24	640	80	2.30	0.58	5.50	0.39	0.21
183	7	nd	4	13	nd	6	0.18	30	2,000	220	2.70	0.49	4.80	1.80	0.35
185	nd	nd	7	22	nd	10	0.35	52	2,200	550	6.00	0.48	2.50	2.50	1.50
193	7	nd	8	12	560	8	0.073	18	3,200	240	2.20	0.090	0.31	1.60	0.43
206A	nd	nd	7	36	1	8	1.20	220	1,000	1,700	7.00	2.00	3.60	0.80	2.40
218	nd	nd	6	22	nd	6	0.89	72	1,200	1,900	5.00	3.00	2.40	3.30	0.84
242	14	nd	9	14	41	6	0.39	48	1,800	660	3.10	0.14	7.60	0.69	0.20
243	33	nd	9	41	130	24	0.73	170	3,400	580	5.00	0.54	3.00	1.50	2.40
244	7	nd	3	10	nd	2	0.44	30	140	640	2.20	0.12	7.40	0.03	0.064
300	6	nd	41	42	nd	26	1.40	210	2,300	1,500	5.60	2.50	1.70	4.60	2.20
302	nd	nd	13	48	nd	16	1.50	120	2,100	3,300	10.00	3.10	0.15	3.60	2.60
306	nd	nd	98	31	nd	180	1.00	180	2,100	800	13.00	1.90	0.12	4.20	3.90
307	9	nd	110	60	nd	210	0.97	170	1,800	800	6.40	2.90	0.08	5.00	4.60
311	5	nd	73	51	nd	96	0.82	190	1,900	580	5.60	3.50	0.54	6.60	2.60
319	6	nd	9	25	nd	6	1.00	130	1,800	1,000	4.20	0.20	7.30	2.70	0.27
320	nd	nd	3	6	nd	4	0.12	nd	210	100	2.20	0.27	7.00	0.03	0.04
327	nd	nd	2	4	nd	2	0.15	6	86	100	1.80	0.13	7.40	0.03	0.05
329	5	nd	9	80	nd	8	0.79	140	2,800	810	16.00	1.70	0.05	0.11	4.30
330	5	nd	16	41	nd	12	0.63	100	980	790	6.60	2.50	0.40	0.12	1.60
331B	5	nd	19	39	1	64	0.86	200	1,700	870	6.20	2.40	3.30	1.20	2.00
331C	nd	nd	2	12	nd	nd	0.20	12	410	190	2.30	0.22	7.80	0.05	0.51
332	nd	nd	19	48	6	38	1.30	310	3,400	1,000	7.90	2.30	1.30	2.90	3.40
334	5	nd	17	48	1	6	0.86	170	2,800	900	5.90	3.00	0.76	1.80	1.50
336	nd	nd	10	39	nd	14	0.89	170	2,400	960	5.00	0.22	6.60	0.67	0.28
343	16	nd	3	15	nd	8	0.14	4	140	140	2.20	0.15	6.20	0.02	0.11
349B	nd	nd	9	39	nd	18	0.31	64	1,000	320	8.00	0.12	0.45	0.05	0.96
351	nd	nd	8	31	1	4	0.86	52	1,100	2,300	5.50	3.60	0.53	0.99	1.10

Detectable Gold - Outcrop Samples

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
352	21 O/16 B	McNeill	Fv?	20	58	320	3	nd	66	1.9	21	0.1	7
355	21 O/16 B	McNeill	Fv	120	96	400	3	nd	61	4.4	19	0.4	8
357B	21 O/16 B	McNeill	Fv	6	18	290	1	nd	12	1.8	nd	nd	8
362	21 O/16 B	McNeill	Mvt?	12	24	250	1	0.5	18	1.4	94	nd	2
363	21 O/16 B	McNeill	Mvt	170	28	130	6	1.5	39	3.0	53	0.1	8
370B	21 O/16 B	Falls Gulch N.Trib	Fv bx	5	18	270	2	nd	23	10.0	81	0.1	2
389	21 O/16 B	McNeill N. Trib.	bx	290	710	11,000	7	1.0	200	3.3	1,320	5.8	51
392	21 O/16 B	McNeill N. Trib.	Mvt?	64	16	130	2	nd	13	0.4	6	nd	3
393	21 O/16 B	McNeill N. Trib.	Fv	8	16	240	4	nd	7	1.2	11	nd	2
405	21 O/16 B	Hayes Gulch	Fvt	230	2,800	2,000	6	nd	19	1.7	140	0.3	16
406	21 O/16 B	Hayes Gulch	Fv?	32	340	840	5	nd	55	1.8	230	0.1	5
407	21 O/16 B	Hayes Gulch	Fvt	9	20	130	1	nd	4	1.5	13	nd	3
413	21 O/16 B	Hayes Gulch	Fvt	32	38	570	2	nd	110	4.2	13	0.2	3
420	21 O/16 B	Hayes Gulch	Fv bx	32	90	270	3	nd	36	3.5	180	nd	6
438	21 O/16 B	Lower McNair	Mvt?	10	32	150	4	nd	48	1.3	35	nd	3
440	21 O/16 B	Lower McNair	Mv	930	6	200	1	2.0	11	1.0	8	0.7	4
444	21 O/16 B	Lower McNair	V	51	3,100	7,600	9	15.0	43	13.0	75	nd	4
447	21 O/16 B	Lower McNair	Mv?	86	nd	110	3	nd	4	0.2	8	nd	2
452	21 O/16 B	Lower McNair	Mv	24	58	150	2	1.5	580	7.7	75	0.2	36
453	21 O/16 B	Lower McNair	Mv bx	30	52	240	6	1.0	85	1.2	45	nd	20
454	21 O/16 B	Lower McNair	Mvt	40	10	190	2	nd	41	2.6	24	nd	2
455	21 O/16 B	Lower McNair	Mv?	28	20	250	3	nd	70	1.0	40	nd	6
460A	21 O/16 B	Lower McNair	Fvt	4	10	82	2	nd	16	0.9	8	0.3	4
469	21 O/9 F	Upper McNair	V bx	3,600	800	900	3	25.0	19	13.0	nd	12.9	4
473	21 O/9 G	Upper McNair	Fvt	10	4,800	1,000	3	1.0	27	4.1	200	0.2	16
489 F	21 O/9 G	Upper McNair	Mvt	20	4	72	4	0.5	11	nd	7	nd	4
501	21 O/16 A	Ryanor Tr # 1	Fv	25	18	210	2	nd	20	1.3	41	0.1	11
502	21 O/16 A	Ryanor Tr # 1	Fv	18	22	240	3	nd	22	1.2	38	0.1	11
505	21 O/16 A	Ryanor Tr # 1	Fv	4	12	54	1	nd	12	1.3	10	0.2	6
510	21 O/16 A	Ryanor Tr # 1	Fv bx	21	96	250	2	3.5	65	2.7	41	0.1	17
521	21 O/16 A	Ryanor Tr # 1	Mv?	8	14	130	10	nd	17	1.0	11	0.1	3
530	21 O/16 A	Ryanor Tr # 1	Fv	3	24	35	3	nd	6	1.5	11	0.1	3
551	21 O/16 B	McNeill Trench	Fv bx	70	70	640	6	0.5	22	1.0	20	0.4	4
553	21 O/16 B	McNeill Trench	bx	4,500	290	1,200	3	2.5	8	nd	26	72.0	50
554	21 O/16 B	McNeill Trench	Mv	92	120	4,800	1	0.5	42	1.1	96	2.1	5
555	21 O/16 B	McNeill Trench	Mv?	1,400	480	960	1	2.5	110	1.9	88	9.4	10
557	21 O/16 B	McNeill Trench	Mv?	500	1,100	6,700	4	1.0	72	1.3	57	4.3	10
597	21 O/9 F	Upper McNair	V	290	1,600	980	12	25.0	110	13.0	44	22.0	42
598	21 O/9 F	Upper McNair	bx	880	1,400	980	3	12.0	59	28.0	7	0.1	4
599	21 O/9 F	Upper McNair	Sed	210	3,800	1,100	2	7.0	42	5.9	7	nd	1
600	21 O/16 A	Lower Jack Burns L	Fv bx	5	22	36	1	nd	17	5.4	35	0.3	5
601	21 O/16 A	Lower Jack Burns L	Fvt	3	16	55	1	nd	14	1.4	18	0.2	4
609	21 O/16 A	Jacquet River	Mvt	5	6	150	3	nd	7	0.8	11	0.1	4
620A	21 O/16 A	Little Ramsay	Fv	3	32	110	3	nd	10	3.5	23	0.1	3
621	21 O/16 A	Big Hole S. Trib.	V	1	94	60	14	0.5	20	2.2	28	nd	nd
623	21 O/16 A	Big Hole S. Trib.	Fv?	39	80	510	10	2.0	170	2.2	210	0.1	2
624	21 O/16 A	Big Hole S. Trib.	Fv?	34	40	230	1	0.5	99	1.6	35	nd	2
625	21 O/16 A	Big Hole S. Trib.	Sed?	1	380	950	20	1.0	7	1.6	70	nd	nd
627A	21 O/16 A	McLean	Fvt	41	150	510	1	1.0	57	1.1	780	1.1	3
627B	21 O/16 A	McLean	Fvt	100	18	53	8	1.0	36	0.6	31	nd	4

Detectable Gold - Outcrop Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
352	5	nd	11	67	nd	12	1.40	320	1,400	1,100	7.60	1.30	3.60	0.15	1.60
355	nd	nd	11	77	2	13	1.80	500	2,100	1,300	7.70	2.00	4.80	1.20	0.43
357B	5	nd	7	37	nd	11	1.20	190	1,900	2,800	7.90	2.10	6.60	1.30	0.49
362	nd	nd	43	27	nd	78	0.47	98	2,600	590	5.20	0.77	3.20	3.80	2.20
363	nd	nd	66	48	1	160	0.96	210	810	1,000	6.10	0.52	6.50	2.10	1.20
370B	nd	nd	3	4	nd	nd	0.13	6	200	80	4.30	0.08	3.60	0.03	0.03
389	5	nd	16	48	50	22	0.50	130	3,600	670	9.80	0.34	1.90	2.00	1.90
392	nd	nd	85	37	1	170	0.75	210	2,000	770	6.60	3.90	2.60	3.30	2.30
393	nd	nd	7	10	1	6	0.33	20	2,700	500	5.30	0.15	7.80	0.42	0.32
405	nd	nd	12	25	9	34	0.87	98	910	1,500	5.40	1.40	4.20	0.63	0.66
406	nd	nd	9	26	5	22	0.84	94	1,700	1,900	6.20	1.30	4.20	0.72	1.10
407	nd	nd	3	3	nd	nd	0.081	4	410	100	1.60	0.11	3.40	0.01	0.02
413	nd	nd	4	10	4	nd	0.07	4	19,000	110	2.40	0.10	6.20	0.08	0.13
420	nd	nd	7	4	2	6	0.11	12	68	90	1.70	0.13	7.10	0.02	0.04
438	7	nd	12	10	nd	2	0.15	40	1,900	170	4.70	0.12	5.90	3.40	0.92
440	nd	nd	7	47	nd	nd	1.60	140	1,600	4,400	9.30	3.00	0.18	2.70	3.40
444	6	nd	6	8	46	nd	0.012	76	4,300	50	2.60	0.09	0.18	5.70	0.33
447	nd	nd	32	49	nd	56	0.97	250	1,400	930	6.80	2.90	0.13	8.50	3.60
452	nd	nd	40	68	nd	20	1.40	400	2,300	1,400	7.80	4.30	0.20	2.80	1.10
453	nd	nd	11	42	nd	4	0.98	240	1,500	1,300	8.70	2.80	0.50	1.40	0.85
454	16	nd	57	43	nd	70	0.49	150	2,500	770	7.10	0.73	2.40	4.40	1.40
455	nd	nd	13	39	nd	14	1.40	290	1,000	1,600	8.90	4.10	0.89	1.60	0.81
460A	nd	1.0	17	26	nd	16	0.53	68	640	640	5.00	3.30	3.10	0.70	1.60
469	12	nd	7	27	9	14	0.27	46	1,200	370	3.70	0.07	0.49	1.20	1.10
473	13	nd	3	4	21	8	0.12	6	500	110	0.39	0.14	7.00	3.00	0.12
489 F	nd	nd	8	37	nd	16	1.10	260	1,400	1,300	7.20	4.20	0.21	5.60	2.00
501	7	nd	43	41	nd	74	0.77	130	1,100	1,600	5.10	2.50	2.30	2.30	1.30
502	10	nd	44	39	1	84	0.81	140	630	1,500	5.20	2.70	2.20	1.50	1.30
505	8	nd	3	8	nd	2	0.26	20	510	260	1.40	1.50	5.10	0.41	0.29
510	14	nd	12	59	2	10	1.30	190	1,700	2,200	7.80	4.20	1.10	1.20	1.30
521	7	nd	25	32	nd	48	1.10	120	1,500	1,300	5.10	1.70	1.20	4.10	1.30
530	nd	nd	2	5	nd	nd	0.26	16	150	320	1.30	0.80	3.30	0.06	0.22
551	nd	nd	7	18	4	4	0.18	26	290	310	4.60	0.13	6.30	0.05	0.29
553	nd	nd	23	69	4	34	0.25	70	1,800	400	20.00	0.05	0.07	0.06	1.10
554	nd	nd	9	50	22	16	0.80	80	2,300	690	14.00	1.00	1.90	0.12	1.20
555	nd	nd	18	21	2	24	0.16	76	500	220	8.50	0.05	0.41	0.05	0.52
557	7	nd	99	64	71	230	0.78	200	4,000	680	11.00	0.59	5.50	0.11	1.70
597	nd	nd	12	43	6	16	0.23	38	0.37	650	9.40	0.09	0.86	0.07	3.30
598	nd	nd	6	9	7	12	0.24	40	0.074	390	2.00	0.05	2.20	0.08	0.38
599	nd	nd	5	5	7	18	0.077	18	0.022	120	2.20	0.03	0.34	0.04	0.17
600	nd	nd	3	8	nd	nd	0.19	14	330	230	2.70	1.50	5.40	0.06	0.30
601	nd	nd	4	9	nd	nd	0.18	12	1,200	190	3.40	1.30	4.40	0.99	0.76
609	nd	nd	73	41	nd	150	0.89	180	1,300	2,400	6.30	2.00	1.40	0.63	2.60
620A	nd	nd	3	6	1	nd	0.13	6	250	140	2.10	0.10	6.20	0.07	0.17
621	15	nd	2	2	nd	6	0.007	2	3,600	40	1.20	0.14	0.33	27.00	0.23
623	15	nd	31	38	3	96	0.95	100	2,500	730	6.10	1.90	5.00	6.50	0.68
624	18	nd	72	55	nd	120	1.20	210	1,900	930	7.40	2.60	3.80	4.00	1.40
625	17	nd	6	5	4	6	0.012	6	8,600	50	7.10	0.13	0.09	20.00	4.20
627A	nd	nd	4	6	3	nd	0.13	12	320	140	2.90	2.20	3.10	0.64	0.46
627B	nd	0.3	5	6	nd	4	0.16	10	200	130	2.20	3.10	2.60	0.63	0.41

Detectable Gold - Outcrop Samples

Sample No.	N.T.S.	Brook/Road	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
630	21 O/16 B	Big Ramsay	Mva	6	2	170	5	nd	4	0.4	24	0.1	nd
631	21 O/16 B	Big Ramsay	Mva	40	4	350	2	nd	5	2.2	8	0.2	2
632	21 O/16 B	Big Ramsay	Mvt	49	14	290	1	nd	13	2.9	10	0.2	2
634	21 O/16 B	Pb Gulch	Fvt	31	260	780	9	0.5	27	2.3	210	2.0	3
637	21 O/16 B	Big Ramsay N. Trib	Fv	69	20	28	2	nd	23	1.0	5	0.9	7
638	21 O/16 B	Big Ramsay N. Trib	Fv	89	12	48	12	nd	13	0.5	5	1.0	7
641	21 O/16 B	Big Ramsay N. Trib	gossan	9	26	110	1	nd	110	1.2	23	32.0	14
643	21 O/16 B	Big Ramsay N. Trib	gossan	52	40	510	4	nd	10	0.4	41	0.1	3
648	21 O/16 B	Wildcat	bx	820	21,000	29,000	15	280	24	2.5	6,370	1.4	9
649	21 O/16 B	Wildcat	Fv	40	300	620	1	3.5	24	2.9	120	nd	7
661	21 O/16 B	Lower McNair	Mvt	13	10	330	4	nd	10	0.4	17	0.3	2
662	21 O/16 B	Lower McNair	Mvt	5	6	260	10	nd	3	0.7	8	nd	3
663A	21 O/16 B	McNeill S. Trib.	Fv	20	620	1,600	1	nd	9	1.7	220	nd	3
663B	21 O/16 B	McNeill S. Trib.	Mv	43	48	880	2	nd	15	1.4	83	nd	6
663C	21 O/16 B	McNeill S. Trib.	Fv?	81	350	1,900	1	nd	27	2.7	600	0.1	2
663D	21 O/16 B	McNeill S. Trib.	Mv?	660	520	2,300	2	nd	71	14.0	880	6.2	6
663E	21 O/16 B	McNeill S. Trib.	Fv?	27	58	670	2	nd	43	3.2	220	nd	3
663 F	21 O/16 B	McNeill S. Trib.	Fv	10	24	450	140	nd	8	1.6	69	nd	3
664A	21 O/16 B	McNeill S. Trib.	Fv	22	680	3,700	9	nd	27	1.9	170	nd	3
664B	21 O/16 B	McNeill S. Trib.	Fv	59	1,400	3,900	2	nd	11	1.7	340	nd	4
664C	21 O/16 B	McNeill S. Trib.	Fv	13	700	2,000	2	nd	36	1.6	67	nd	4
665	21 O/16 B	McNeill	Fvt	46	520	860	39	nd	32	1.8	200	0.1	5
666	21 O/16 B	McNeill	Mvt	41	50	370	1	nd	6	1.4	30	nd	4
667	21 O/16 B	McNeill	Fv	5	30	150	2	nd	14	1.1	15	0.2	4
668	21 O/16 B	McNeill	Fv	18	14	400	10	nd	26	1.1	15	nd	6
669	21 O/16 B	McNeill	Mva	160	220	150	19	nd	170	3.1	89	nd	4
670	21 O/16 B	Lower McNair	Mvt	44	14	250	4	nd	70	0.9	67	nd	6
671	21 O/16 B	Lower McNair	Mva	22	28	200	20	0.5	46	0.9	47	nd	10
672	21 O/16 B	Lower McNair	Mv	49	26	210	9	nd	41	0.4	37	0.2	16
672A	21 O/16 B	Lower McNair	Mvt	6,400	16	250	20	0.5	15	0.4	13	0.7	7
673	21 O/16 B	Little McLean	Fvt	17	2	110	5	nd	20	1.2	630	nd	4
677	21 O/16 B	Little Mclean	Fvt	8	4	81	1	nd	43	9.1	110	0.9	4
679A	21 O/16 B	Wildcat	Fv	100	820	1,300	4	4.5	110	3.1	430	nd	3
679B	21 O/16 B	Wildcat	Fv bx	160	680	550	2	12.0	110	3.3	570	nd	3
680	21 O/16 B	McNeill	Mv	2,100	48	250	5	0.5	90	1.5	49	12.0	100
684	21 O/16 B	McNeill N. Trib.	bx	200	280	8,700	13	nd	220	3.6	600	5.0	43
688	21 O/16 B	Hayes Gulch	Fvt	45	310	320	2	4.5	390	14.0	390	0.1	9
691A	21 O/16 B	Hayes Gulch	Fvt	14	380	690	32	nd	9	1.6	44	0.2	2
702	21 O/9 F	Rocky Brook	Fvt	18	6	56	1	nd	5	3.9	nd	0.8	5
725	21 O/10 H	N.B.I.P. Road	Fvt	2	14	76	9	nd	9	2.9	55	nd	3
733	21 O/10 C	Jerry Ferguson	Mv bx	88	24	110	26	0.5	5	4.1	13	0.2	6
744	21 O/9 F	Rocky Gulch	Sed	53	12	140	20	0.5	6	0.5	10	0.3	7
745	21 O/9 F	Rocky Gulch	Sed	34	32	720	17	nd	6	16.0	220	0.2	4
750B	21 O/9 F	Sormony Road	Mva	43	8	84	2	nd	52	2.0	29	nd	5
800	21 O/10 H	9 Mile Bk. Road	Mv?	29	24	97	19	0.5	18	0.6	20	0.2	6
805	21 O/10 B	Six Mile	Fv?	5	6	36	17	nd	1	0.6	13	0.1	3
888	21 O/9 F	Rocky/Charlo	Fv	32	120	160	7	30.0	100	100	48	nd	3
895A	21 O/10 H	9 Mile Bk. Road	V	750	50	56	16	2.5	320	23.0	520	4.6	4
895B	21 O/10 H	9 Mile Bk. Road	V	5,400	190	550	420	9.0	540	39.0	900	41.0	9
896	21 O/10 H	9 Mile Bk. Road	V	1,700	240	220	630	14.0	30	17.0	980	258	6

Detectable Gold - Outcrop Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
630	11	nd	63	34	nd	48	0.43	140	2,300	560	5.80	1.20	0.80	8.00	1.90
631	7	nd	100	35	nd	160	0.84	150	1,800	880	9.70	2.60	0.78	2.30	2.50
632	nd	nd	110	46	nd	220	0.71	190	1,700	570	6.90	2.30	0.94	8.60	1.70
634	nd	nd	13	26	nd	26	0.99	100	1,100	2,200	8.30	2.80	6.00	1.10	0.21
637	nd	0.1	3	9	nd	nd	0.20	6	160	180	2.40	0.19	6.50	0.04	0.37
638	nd	nd	3	8	nd	4	0.22	12	200	220	2.10	0.17	7.00	0.04	0.41
641	nd	6.7	6	17	nd	16	0.37	98	650	470	9.00	0.75	0.10	0.07	1.80
643	nd	0.6	8	29	1	18	0.29	86	1,800	320	9.90	0.22	0.13	0.08	3.90
648	16	nd	12	50	86	12	0.85	210	3,500	700	6.10	0.83	4.90	2.80	2.60
649	nd	nd	3	11	2	2	0.31	34	660	450	2.70	0.14	10.00	0.08	0.11
661	5	nd	33	36	1	54	0.71	150	1,700	540	8.30	1.40	1.40	0.36	2.20
662	nd	nd	37	36	1	48	0.96	480	1,300	1,100	7.30	3.60	2.40	0.60	1.30
663A	nd	nd	17	33	10	56	0.83	400	3,600	890	6.20	3.40	3.30	2.50	1.30
663B	nd	nd	14	48	4	14	1.30	320	4,700	1,300	9.40	0.55	5.10	1.30	1.60
663C	nd	nd	13	21	12	26	0.52	58	3,500	650	5.90	0.16	5.20	2.60	0.79
663D	5	nd	11	27	15	38	0.64	100	1,300	390	4.90	1.40	0.28	0.54	0.81
663E	nd	nd	15	34	7	8	1.10	180	3,700	1,100	8.80	1.80	3.50	1.00	0.65
663 F	7	nd	20	30	2	54	0.84	260	4,400	790	6.40	1.60	5.30	4.60	1.60
664A	nd	nd	22	43	13	50	0.81	110	4,500	870	7.20	3.30	2.40	2.70	1.10
664B	nd	nd	20	46	29	50	0.97	130	5,000	920	7.20	2.30	3.40	3.80	1.00
644C	nd	nd	23	62	6	64	0.89	92	4,000	920	7.90	4.00	1.20	2.00	1.20
665	nd	nd	23	29	3	36	0.68	96	1,800	1,300	6.30	0.15	6.50	0.54	0.63
666	nd	nd	58	35	nd	98	0.76	140	3,400	660	6.00	0.35	5.90	2.00	1.30
667	nd	nd	4	14	nd	nd	0.50	26	850	620	6.00	0.38	7.00	0.29	0.13
668	nd	nd	13	56	nd	10	1.90	430	2,300	1,300	7.80	1.40	5.50	1.40	1.50
669	nd	nd	7	28	nd	nd	1.20	60	2,000	2,600	6.80	4.30	0.56	0.89	1 10
670	15	nd	12	45	nd	12	1.60	380	1,100	1,800	8.70	4.50	0.39	0.81	0.86
671	nd	nd	9	46	nd	12	1.50	250	980	2,000	7.80	4.50	0.64	0.18	0.63
672	6	nd	10	25	nd	26	1.20	110	750	2,200	7.50	2.60	2.30	0.48	0.81
672A	nd	nd	23	55	nd	76	1.30	250	1,400	1,200	7.30	3.40	4.70	0.13	1.60
673	8	nd	9	13	nd	12	0.48	36	440	760	3.60	6.40	0.45	1.90	0.97
677	8	nd	3	6	nd	nd	0.15	6	590	130	3.50	0.96	6.50	0.04	0.08
679A	nd	nd	3	8	13	10	0.39	38	180	690	2.60	0.15	9.40	0.03	nd
679B	nd	nd	3	8	2	6	0.34	30	130	680	2.60	0.16	9.50	0.06	0.02
680	5	nd	13	48	nd	30	0.43	120	1,500	320	9.60	0.73	0.02	0.45	1.30
684	6	nd	14	42	43	22	0.48	120	2,700	640	10.00	0.64	2.60	0.79	1.50
688	nd	nd	7	20	4	8	0.58	86	90	770	2.90	0.12	5.90	0.04	0.07
691A	nd	nd	6	21	1	16	0.62	54	860	1,300	6.20	0.18	5.30	1.10	0.76
702	7	nd	4	7	nd	4	0.18	36	240	200	1.90	0.45	7.00	0.04	0.12
725	nd	nd	5	5	nd	4	0.088	8	170	80	1.30	0.22	4.40	0.22	0.23
733	nd	nd	53	30	nd	88	0.66	140	620	1,000	3.80	2.60	1.00	4.80	0.64
744	nd	nd	59	42	nd	110	0.94	200	1,300	1,200	6.70	2.20	1.80	2.90	2.50
745	nd	nd	71	32	5	60	0.30	68	1,400	460	6.10	0.13	1.30	13.00	1.40
750B	nd	nd	88	39	nd	210	0.91	260	660	810	7.70	3.60	1.70	1.50	1.80
800	nd	nd	11	22	nd	6	0.60	96	580	1,000	3.50	0.63	0.16	5.70	0.49
805	nd	nd	4	4	nd	12	0.17	18	410	210	0.78	4.30	0.90	0.07	0.15
888	nd	nd	21	11	1	140	0.43	130	160	250	2.40	0.08	3.00	0.13	0.63
895A	8	nd	11	25	nd	20	0.19	60	3,800	370	2.80	0.17	1.10	15.00	0.26
895B	nd	nd	21	53	3	8	0.08	42	2,500	210	6.60	0.15	0.52	8.40	0.28
896	nd	nd	11	15	nd	8	0.26	52	1,200	500	5.20	0.07	1.40	1.00	0.33

Detectable Gold - Outcrop Samples

Sample No.	N.T.S.	Brook	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
897	21 O/10 H	9 Mile Bk. Road	MI	32	28	170	6	nd	27	4.2	300	5.5	5
898	21 O/10 H	9 Mile Bk. Road	V	83,000	3,800	470	1,200	200	95	28.0	6,530	723	4

Detectable Gold - Outcrop Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
897	9	nd	12	20	nd	12	0.39	70	1,400	750	4.70	0.55	2.90	2.30	0.74
898	10	nd	8	25	3	nd	0.02	38	610	640	18.00	0.05	0.37	0.61	0.18

Detectable Gold - Drill Core Samples

Sample No.	Drill. Hole	From (m)	To (m)	Width (m)	Rock Type	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppb)	Bi (ppm)	Mo (ppm)
DC-12	MD-2	54.85	57.88	3.03	gouge	11	nd	47	1	nd	2.0	0.1	19	0.2	NA
DC-53	MD-2	72.12	73.03	0.91	Fv	5	20	76	7	2.0	12	1.0	18	0.1	6
DC-54	MD-2	79.34	79.75	0.40	Fv	3	28	67	3	0.5	9	0.8	nd	0.1	5
DC-55	MD-2	80.30	80.98	0.68	Fv bx	4	16	56	5	nd	8	0.8	nd	0.1	5
DC-57	MD-2	83.18	83.58	0.40	Fv bx	3	14	44	20	nd	9	0.7	6	0.1	6
DC-58	MD-2	84.92	85.52	0.60	Fv bx	3	14	41	4	nd	8	0.9	nd	0.2	5
DC-59	MD-2	87.58	88.66	1.08	Hv	6	18	200	4	0.5	58	1.9	6	0.1	7
DC-60	MD-2	89.78	90.08	0.30	Hv	8	20	170	2	1.0	71	1.4	12	0.2	7
DC-61	MD-2	90.30	90.83	0.53	Hv	10	36	150	1	1.5	52	1.2	28	0.1	8
DC-62	MD-2	90.83	91.21	0.38	Hv	12	12	64	2	nd	15	0.7	nd	0.2	4
DC-64	MD-2	93.84	94.14	0.30	Hv	30	20	220	1	1.0	24	1.1	6	0.1	6
DC-65	MD-2	94.55	95.76	1.21	Hv	35	40	160	8	1.5	72	1.3	12	0.1	6
DC-67	MD-2	103.64	104.24	0.60	Fv	4	100	61	2	nd	8	3.4	15	0.1	3
DC-69	MD-2	105.15	105.63	0.48	Fv	4	20	140	1	3.5	19	1.6	11	0.2	3
DC-71	MD-2	106.46	106.97	0.51	Hv	18	14	150	2	1.0	11	1.0	15	0.2	4
DC-73	MD-2	108.79	109.09	0.30	Fv	20	32	150	2	4.0	7	1.2	26	0.2	5
DC-76	MD-2	122.37	122.85	0.48	Hvp	42	14	140	2	0.5	7	0.9	8	0.1	6
DC-77	MD-2	126.06	126.67	0.61	Hvp	34	16	130	1	3.5	12	1.3	15	0.2	6
DC-78	MD-2	127.88	128.08	0.20	Sed	55	14	140	1	nd	8	1.3	41	0.3	6
DC-79	MD-2	128.49	129.70	1.21	Hv	13	16	140	13	0.5	24	1.2	11	0.2	6
DC-41	MB-84-1	72.80	74.80	2.00	Fv bx	1,300	1,000	3,600	6	nd	23	1.0	300	2.0	3
DC-42	MB-84-1	78.30	79.04	0.74	Hv	1,100	110	460	5	nd	28	0.9	52	4.0	20
DC-43	MB-84-1	79.04	79.95	0.91	Sed	1,100	140	1,300	5	1.0	46	1.3	120	6.0	8
DC-44	MB-84-1	79.95	80.11	0.16	V	800	200	1,400	3	1.0	64	1.0	130	6.0	6
DC-45	MB-84-1	82.97	83.80	0.83	Hva	270	3,500	5,700	4	nd	50	1.3	69	nd	2
DC-46	MB-84-1	84.80	85.80	1.00	Hva	420	6,400	20,000	4	nd	25	1.0	100	nd	2
DC-47	MB-84-1	86.80	87.80	1.00	Hvt	320	180	940	5	0.5	78	1.7	100	12.0	15
DC-34	MB-84-2	53.95	54.32	0.37	Fv	4	8	96	3	nd	20	0.2	49	nd	2
DC-36	MB-84-2	86.15	87.09	0.94	Fv	4	10	89	3	nd	11	0.4	55	nd	2
DC-37	MB-84-2	124.05	124.58	0.53	Fvt?	2,000	160	360	5	nd	33	1.6	58	3.0	20
DC-39	MB-84-2	158.43	159.30	0.87	Hv	190	1,900	7,100	2	1.5	11	0.5	72	3.0	5
DC-17	MB-84-3	4.38	4.69	0.31	Fv	4	290	650	8	0.5	130	1.4	20	nd	2
DC-18	MB-84-3	8.75	9.74	0.99	Fv	13	150	690	6	0.5	110	0.6	17	nd	2
DC-19	MB-84-3	13.27	14.23	0.96	Hv	14	94	680	5	nd	50	1.1	20	nd	2
DC-20	MB-84-3	14.23	15.29	1.06	Hv	55	220	670	4	0.5	37	1.2	6	nd	2
DC-21	MB-84-3	15.29	16.48	1.19	Hv	44	550	1,300	3	nd	31	1.3	20	nd	2
DC-26	MB-84-3	59.05	60.05	1.00	Fv fb	6	14	130	4	nd	20	0.8	12	nd	2
DC-27	MB-84-3	61.58	62.58	1.00	Fv fb	8	82	140	4	nd	30	0.7	6	nd	2
DC-32	MB-84-3	124.37	125.26	0.89	Hv	210	14	260	2	nd	10	0.6	6	nd	4
DC-33	MB-84-3	125.26	125.93	0.67	Hv	220	14	270	6	nd	13	0.6	17	nd	5

Detectable Gold - Drill Core Samples

Sample No.	Se (ppm)	Te (ppm)	Ni (ppm)	Co (ppm)	Cd (ppm)	Cr (ppm)	Ti (%)	V (ppm)	Mn (ppm)	P (ppm)	Fe (%)	Na (%)	K (%)	Ca (%)	Mg (%)
DC-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-53	nd	nd	16	17	nd	24	0.37	NA	1,000	480	3.40	0.63	4.20	1.50	0.98
DC-54	nd	nd	8	11	nd	nd	0.18	NA	3,000	270	3.60	1.10	4.10	5.40	2.40
DC-55	7	nd	8	11	nd	4	0.19	NA	1,600	290	2.70	0.69	4.50	3.50	1.00
DC-57	6	nd	4	9	nd	nd	0.21	NA	440	300	2.00	0.71	5.20	0.96	0.51
DC-58	nd	1	4	8	nd	nd	0.19	NA	840	260	2.10	0.98	4.60	1.60	0.70
DC-59	nd	nd	10	48	nd	12	0.76	NA	1,500	1,700	8.10	1.50	1.70	4.60	1.80
DC-60	7	nd	11	47	nd	nd	0.72	NA	2,700	1,600	8.80	1.70	1.40	5.30	2.70
DC-61	11	1	9	44	nd	8	0.97	NA	1,100	2,000	8.20	3.60	1.30	2.40	1.00
DC-62	10	1	6	13	nd	nd	0.20	NA	1,200	280	3.10	1.40	4.50	3.10	1.10
DC-64	11	nd	11	57	nd	4	0.99	NA	1,500	1,500	8.40	2.40	1.40	3.30	1.50
DC-65	11	1	13	44	nd	10	0.99	NA	1,000	1,700	7.70	3.30	1.40	2.00	1.10
DC-67	nd	nd	4	3	nd	4	0.043	NA	340	40	2.00	0.92	3.80	0.58	0.47
DC-69	nd	1	15	18	nd	8	0.31	NA	1,500	820	4.80	1.70	2.70	4.00	1.40
DC-71	nd	1	26	31	nd	40	0.51	NA	1,900	1,500	5.80	1.90	1.80	4.80	2.30
DC-73	5	1	34	37	nd	40	0.59	NA	1,100	1,600	6.10	1.80	2.80	2.80	1.60
DC-76	9	nd	30	52	nd	48	0.88	NA	1,700	1,400	7.10	3.10	1.60	4.80	2.10
DC-77	8	nd	24	47	nd	30	0.96	NA	820	1,600	6.90	2.70	1.60	3.00	1.20
DC-78	11	1	27	36	nd	38	0.54	NA	1,300	1,200	5.90	1.70	1.70	3.60	1.60
DC-79	12	nd	23	50	nd	28	0.93	NA	890	1,600	7.30	2.80	1.50	3.40	1.50
DC-41	nd	nd	46	49	22	60	0.85	160	3,600	690	10.00	0.59	3.30	3.90	2.40
DC-42	nd	nd	29	46	1	34	0.88	160	2,100	910	9.60	0.46	4.60	2.80	1.40
DC-43	nd	nd	62	47	5	160	0.57	180	2,700	350	10.00	0.76	1.40	3.90	1.70
DC-44	nd	nd	63	54	3	260	0.92	270	3,100	520	12.00	1.40	2.60	7.00	1.40
DC-45	5	nd	68	43	21	200	0.62	180	3,500	350	8.10	2.30	0.96	4.50	2.80
DC-46	10	nd	69	42	95	250	0.69	210	4,100	430	7.90	1.90	2.90	5.40	3.00
DC-47	nd	nd	41	39	2	120	0.38	140	2,300	260	14.00	0.08	1.00	3.30	1.70
DC-34	8	nd	95	54	nd	180	0.99	270	1,200	620	8.80	2.10	0.50	7.90	5.00
DC-36	nd	nd	7	6	nd	6	0.20	20	610	190	2.80	1.90	2.60	3.10	0.63
DC-37	nd	nd	37	44	nd	48	0.81	120	2,000	580	7.60	0.33	4.80	2.30	1.50
DC-39	6	nd	94	49	24	310	0.75	230	4,400	300	9.70	3.20	0.18	7.10	4.00
DC-17	nd	nd	15	36	2	40	1.00	86	3,700	850	7.80	3.20	2.60	5.10	1.10
DC-18	nd	nd	21	41	2	44	1.00	66	1,900	940	8.20	0.75	3.30	2.90	1.30
DC-19	nd	nd	120	47	1	200	0.96	130	5,900	750	7.20	0.27	7.10	8.90	1.70
DC-20	nd	nd	120	45	1	190	0.90	120	6,000	740	7.00	0.19	6.70	8.00	1.70
DC-21	nd	nd	98	42	3	180	0.98	120	5,800	870	7.60	0.18	6.70	8.50	1.60
DC-26	nd	nd	7	9	nd	6	0.26	28	720	400	4.00	1.70	4.00	1.30	0.58
DC-27	nd	nd	8	10	nd	4	0.33	58	460	530	3.40	1.30	5.10	1.00	0.57
DC-32	nd	nd	9	19	nd	2	0.87	54	1,900	2,100	5.90	2.50	2.80	4.10	1.70
DC-33	nd	nd	9	21	nd	nd	0.84	48	1,800	2,200	6.60	2.60	2.70	3.70	1.70

APPENDIX E

Notes on Analytical Precision

A number of reputable analytical laboratories are available in Canada, and the choice of X-Ray Assay Laboratories Limited for this study was made on the basis of several criteria, namely:

1) Colleagues at the G.S.C. expressed confidence in this laboratory based upon their own monitoring program.

2) Dr. G.P. Watson of the G.S.C. was conducting litho-geochemical studies elsewhere in the Tobique-Chaleur Subzone, and was using X-Ray Assay for his analytical work. By utilizing the same laboratory for both projects it was felt that the two data sets could be merged with confidence for future studies.

3) The analytical package and detection limits offered by X-Ray Assay best suited the needs of the project.

4) The cost/sample was competitive.

During the course of the study the laboratory was checked in four ways:

1) In most cases any sample that returned an analysis of >10 ppb Au or a significant base metal value was resampled (many of the 600 series sample numbers are field checks).

2) A number of International Standards were submitted to X-Ray by M. McLeod (Geological Surveys Branch, Sussex) and the analytical results obtained were satisfactory.

3) The pulps from sixteen samples analysed by X-Ray Assay

were submitted to Chemex Laboratories (Vancouver) for duplicate analyses. A partial listing of the results is attached.

4) Duplicate analyses were made on two cuts from the same rock for seven samples. A partial listing of these analyses is attached.

CHECK ANALYSES - 16 SAMPLES BY XRAY & CHEMEX

Sample	ppm Cu		ppm Pb		ppm Zn		ppb Au	
No.	XRAY	CHEMEX	XRAY	CHEMEX	XRAY	CHEMEX	XRAY	CHEMEX
1	29000	>10000	230	224	870	674	4	8
2	14000	>10000	500	446	1400	1125	9	10
3	110	120	44	56	100	78	>10000	>10000
4	28	25	8	10	81	60	760	762
5	61	40	84	92	50	62	270	518
6	27	24	6	8	19	10	34	27
7	75	64	36	40	25	14	1200	1660
8	27	20	4	<2	26	14	3900	6110
9	18	17	190	174	150	106	21	43
10	35	25	20	48	86	52	16	35
11	160	149	5100	4830	1500	1230	380	37
12	20	16	92	108	72	56	350	4
13	61	85	3200	3120	770	638	390	49
14	87	98	2500	2530	1100	1135	530	885
15	27	24	14	16	26	16	3	<1
16	410	415	520	548	160	140	30	15

CHECK ANALYSES - 16 SAMPLES BY XRAY & CHEMEX

Sample	ppm Ag		ppm As		ppm Sb		ppb Hg	
No.	XRAY	CHEMEX	XRAY	CHEMEX	XRAY	CHEMEX	XRAY	CHEMEX
1	7.0	6.8	65	65	1.6	<5	100	70
2	8.5	7.2	84	75	3.2	<5	870	710
3	2.0	1.8	49000	>10000	65	35	38	40
4	1.0	0.2	1900	1960	4.4	5	19	20
5	0.5	1.0	88	90	2.3	<5	8	10
6	0.5	0.2	32	40	2.6	<5	27	30
7	<0.5	0.2	310	310	2.2	<5	23	20
8	<0.5	0.2	190	190	2.2	<5	15	30
9	<0.5	0.2	35	30	9.6	<5	34	30
10	<0.5	0.2	39	30	9.3	<5	23	20
11	21.0	23.6	130	145	27	<5	140	140
12	3.0	2.0	44	55	4.0	<5	42	50
13	140	128	930	900	75	50	76	90
14	220	>200	8200	>10000	82	175	30	60
15	<0.5	0.4	28	35	0.2	<5	30	40
16	4.0	3.0	84	80	4.5	<5	76	90

CHECK ANALYSES - 16 SAMPLES BY XRAY & CHEMEX

Sample No.	ppm Bi XRAY	ppm Bi CHEMEX	ppm Mo XRAY	ppm Mo CHEMEX	ppm Ni XRAY	ppm Ni CHEMEX	ppm Co XRAY	ppm Co CHEMEX
1	72	60	17	15	32	43	24	30
2	45	46	10	7	24	19	17	23
3	0.5	4	4	<1	5	4	46	34
4	<0.1	4	4	<1	5	9	27	17
5	<0.1	<2	6	2	13	13	16	11
6	0.3	<2	7	2	83	74	32	29
7	0.2	<2	2	<1	38	33	35	32
8	<0.1	<2	7	2	63	42	30	26
9	<0.1	<2	8	4	12	9	9	5
10	<0.1	<2	6	2	12	10	8	6
11	0.1	<2	260	230	12	9	3	5
12	0.1	<2	180	157	8	6	5	5
13	<0.1	<2	58	53	5	28	6	7
14	0.8	<2	130	125	9	10	4	6
15	<0.1	<2	57	55	19	14	12	13
16	<0.1	<2	46	41	10	7	9	8

CHECK ANALYSES - 16 SAMPLES BY XRAY & CHEMEX

Sample No.	ppm Cr XRAY	ppm Cr CHEMEX
1	710	717
2	780	688
3	150	133
4	170	160
5	290	243
6	140	90
7	380	299
8	410	312
9	320	265
10	510	459
11	700	501
12	480	393
13	150	181
14	350	293
15	180	163
16	120	117

CHECK ANALYSES - 7 SAMPLES BY XRAY (2 CUTS)

Sample	ppm Cu		ppm Pb		ppm Zn		ppb Au	
No.	Cut#1	Cut#2	Cut#1	Cut#2	Cut#1	Cut#2	Cut#1	Cut#2
1	1500	1600	27000	29000	51000	52000	26	26
2	7	4	86	82	230	140	<1	<1
3	83	76	22	18	120	87	<1	<1
4	28	28	16	20	100	240	<1	<1
5	32	30	120	100	160	160	7	8
6	28	27	38	42	76	91	<1	<1
7	14	19	34	20	100	48	<1	<1

CHECK ANALYSES - 7 SAMPLES BY XRAY (2 CUTS)

Sample	ppm Ag		ppm As		ppm Sb		ppb Hg	
No.	Cut#1	Cut#2	Cut#1	Cut#2	Cut#1	Cut#2	Cut#1	Cut#2
1	9.5	8.0	29	35	6.6	6.6	>1000	2700
2	0.5	0.5	7	31	1.8	1.3	40	22
3	0.5	0.5	7	19	0.8	0.6	37	43
4	0.5	0.5	7	8	0.6	0.4	38	54
5	30.0	28.0	100	92	100	75.0	48	126
6	1.0	1.0	95	97	3.7	2.9	26	54
7	1.0	1.0	35	28	4.5	3.3	67	94

CHECK ANALYSES - 7 SAMPLES BY XRAY (2 CUTS)

Sample	ppm Bi		ppm Mo		ppm Ni		ppm Co	
No.	Cut#1	Cut#2	Cut#1	Cut#2	Cut#1	Cut#2	Cut#1	Cut#2
1	<1	<1	16	12	6	8	12	12
2	<1	<1	3	3	3	4	6	6
3	<1	<1	1	2	62	60	21	20
4	<1	<1	2	3	48	49	19	20
5	<1	<1	3	3	21	21	11	12
6	<1	1.0	5	4	12	13	17	17
7	<1	<1	4	3	13	10	16	12